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Table 1. Journal of observations

Dates	filter	Time (s)	FWHM (arcsec)	Air Mass
<b>Las Campanas:</b>				
<b>NGC 6822 West:</b>				
1999 Oct 2.....	R	3×480	2.5	1.06
1999 Oct 2.....	TiO	4×900	2.0	1.17
1999 Oct 2.....	CN	3×900	2.0	1.50
1999 Oct 3.....	R	480	1.6	1.32
1999 Oct 3.....	CN	900	1.7	1.49
1999 Oct 3.....	TiO	2×900	1.7	1.54
<b>NGC 6822 East:</b>				
1999 Oct 3.....	R	3×480	1.7	1.04
1999 Oct 3.....	TiO	3×900	2.2	1.09
1999 Oct 3.....	CN	3×900	1.7	1.21
<b>CFH12K:</b>				
2000 Sep 24.....	I	300	1.0	1.22
2000 Sep 24.....	R	400	0.7	1.22
2000 Sep 24.....	CN	1500	0.7	1.23
2000 Sep 24.....	TiO	1500	0.8	1.26

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Table 2. C stars in NGC 6822

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c001	19:43:52.57	−14:40:58.8	18.724	0.006	1.214	0.009	0.469	0.013
c002	19:43:52.69	−14:41:40.0	18.998	0.007	1.147	0.010	0.424	0.013
c003	19:43:56.96	−14:43:01.8	19.280	0.008	1.419	0.013	0.457	0.016
c004	19:43:54.52	−14:43:35.5	19.667	0.010	1.255	0.015	0.423	0.023
c005	19:43:58.53	−14:37:44.2	20.745	0.022	1.624	0.046	0.403	0.043
c006	19:44:28.08	−14:37:58.2	18.163	0.005	1.177	0.008	0.371	0.009
c007	19:44:19.70	−14:40:59.5	18.420	0.005	1.175	0.007	0.504	0.010
c008	19:44:02.54	−14:44:40.1	18.458	0.005	1.257	0.008	0.531	0.011
c009	19:44:21.12	−14:44:24.2	18.542	0.006	1.266	0.009	0.370	0.011
c010	19:44:10.33	−14:46:55.1	18.724	0.006	1.425	0.011	0.520	0.012
c011	19:44:01.93	−14:41:09.6	19.047	0.008	1.300	0.013	0.453	0.014
c012	19:44:26.58	−14:43:32.7	19.023	0.007	1.480	0.012	0.456	0.014
c013	19:44:26.36	−14:43:29.3	19.110	0.008	1.141	0.012	0.334	0.015
c014	19:44:18.81	−14:47:21.9	19.027	0.007	1.513	0.012	0.497	0.014
c015	19:44:19.68	−14:45:04.2	19.095	0.010	1.314	0.016	0.448	0.017
c016	19:44:26.55	−14:45:41.3	19.079	0.010	1.629	0.018	0.498	0.020
c017	19:44:17.54	−14:48:04.8	19.145	0.010	1.109	0.014	0.450	0.017
c018	19:44:20.37	−14:46:51.1	19.150	0.008	1.280	0.014	0.502	0.017
c019	19:44:24.86	−14:43:22.6	19.151	0.009	1.273	0.014	0.481	0.020
c020	19:44:05.09	−14:47:47.6	19.126	0.008	1.476	0.014	0.475	0.014

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c021	19:44:23.81	-14:42:29.6	19.187	0.012	1.171	0.015	0.454	0.015
c022	19:44:19.90	-14:41:10.6	19.207	0.008	1.276	0.012	0.499	0.016
c023	19:44:15.44	-14:44:09.4	19.219	0.008	1.316	0.013	0.491	0.017
c024	19:44:09.71	-14:36:26.1	19.261	0.009	1.147	0.013	0.436	0.017
c025	19:44:27.63	-14:46:09.5	19.170	0.009	1.594	0.015	0.547	0.018
c026	19:44:24.89	-14:43:28.7	19.214	0.009	1.804	0.017	0.424	0.016
c027	19:44:12.33	-14:43:36.5	19.296	0.009	1.560	0.016	0.415	0.017
c028	19:44:04.70	-14:47:07.9	19.420	0.010	1.127	0.014	0.304	0.018
c029	19:44:27.08	-14:46:33.1	19.390	0.010	1.394	0.017	0.537	0.020
c030	19:44:03.10	-14:44:24.1	19.361	0.016	1.384	0.020	0.449	0.018
c031	19:44:18.59	-14:46:58.2	19.408	0.010	1.356	0.015	0.440	0.018
c032	19:44:26.56	-14:47:25.1	19.462	0.011	1.302	0.019	0.474	0.021
c033	19:44:22.14	-14:46:24.8	19.393	0.009	1.559	0.018	0.372	0.089
c034	19:44:25.49	-14:46:01.0	19.475	0.012	1.183	0.017	0.425	0.020
c035	19:44:25.16	-14:36:22.4	19.529	0.010	1.110	0.015	0.306	0.020
c036	19:44:18.21	-14:42:42.7	19.546	0.009	1.158	0.015	0.373	0.021
c037	19:44:24.04	-14:47:10.5	19.514	0.015	1.618	0.021	0.586	0.019
c038	19:44:26.55	-14:41:35.6	19.568	0.012	1.426	0.019	0.670	0.022
c039	19:44:26.33	-14:44:25.8	19.414	0.022	1.560	0.030	0.766	0.031
c040	19:44:22.48	-14:46:25.2	19.776	0.015	1.212	0.022	0.554	0.027

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c041	19:44:25.51	-14:40:36.6	19.951	0.013	1.111	0.021	0.423	0.025
c042	19:44:13.70	-14:40:10.9	20.677	0.024	1.972	0.058	0.353	0.046
c043	19:44:54.39	-14:45:01.6	17.933	0.005	1.482	0.010	0.511	0.010
c044	19:44:53.78	-14:47:51.2	18.206	0.013	1.260	0.026	0.514	0.027
c045	19:44:53.53	-14:45:59.2	18.259	0.015	1.558	0.029	0.522	0.019
c046	19:44:53.21	-14:44:18.5	18.335	0.010	1.400	0.021	0.594	0.019
c047	19:44:43.08	-14:45:10.1	18.327	0.005	1.313	0.010	0.495	0.011
c048	19:44:49.19	-14:45:36.2	18.454	0.010	1.194	0.016	0.475	0.021
c049	19:44:47.47	-14:48:07.9	18.525	0.009	1.421	0.016	0.537	0.018
c050	19:44:54.17	-14:45:20.5	18.566	0.008	1.188	0.012	0.416	0.013
c051	19:44:43.21	-14:45:02.6	18.595	0.007	1.108	0.011	0.457	0.015
c052	19:44:49.43	-14:47:37.7	18.499	0.031	1.195	0.039	0.457	0.025
c053	19:44:50.13	-14:46:11.2	18.658	0.029	1.262	0.054	0.378	0.043
c054	19:44:52.81	-14:44:27.7	18.596	0.006	1.426	0.011	0.566	0.013
c055	19:44:44.88	-14:43:28.4	18.682	0.006	1.342	0.011	0.517	0.013
c056	19:44:44.66	-14:46:42.7	18.736	0.011	1.337	0.018	0.472	0.020
c057	19:44:56.15	-14:40:16.7	18.751	0.007	1.102	0.011	0.356	0.013
c058	19:44:51.47	-14:47:07.1	18.693	0.009	1.561	0.018	0.563	0.021
c059	19:44:43.05	-14:44:33.1	18.847	0.009	1.262	0.018	0.384	0.018
c060	19:44:30.47	-14:47:22.4	18.796	0.007	1.612	0.016	0.499	0.013

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c061	19:44:53.06	-14:47:48.6	18.903	0.013	1.315	0.021	0.461	0.022
c062	19:44:49.69	-14:47:08.3	18.897	0.012	1.274	0.021	0.458	0.021
c063	19:44:38.26	-14:46:03.2	18.857	0.015	1.372	0.026	0.338	0.028
c064	19:44:55.34	-14:47:02.9	18.948	0.014	1.276	0.026	0.488	0.027
c065	19:44:56.27	-14:46:02.8	18.881	0.010	1.342	0.020	0.574	0.023
c066	19:44:54.81	-14:46:36.3	18.868	0.007	1.299	0.014	0.507	0.016
c067	19:44:32.34	-14:40:37.1	18.838	0.007	1.348	0.012	0.437	0.014
c068	19:44:41.43	-14:36:59.0	18.895	0.007	1.268	0.011	0.396	0.013
c069	19:44:40.90	-14:47:54.7	18.940	0.022	1.327	0.040	0.491	0.046
c070	19:44:37.38	-14:44:44.1	18.899	0.007	1.375	0.013	0.472	0.016
c071	19:44:54.54	-14:45:28.1	18.970	0.011	1.274	0.025	0.531	0.019
c072	19:44:43.95	-14:45:46.2	18.940	0.010	1.510	0.022	0.515	0.020
c073	19:44:33.19	-14:43:23.3	18.893	0.008	1.449	0.015	0.489	0.015
c074	19:44:35.73	-14:47:14.3	18.871	0.007	1.575	0.014	0.565	0.016
c075	19:44:56.63	-14:44:35.6	18.928	0.008	1.271	0.013	0.550	0.017
c076	19:44:54.25	-14:40:26.0	18.969	0.008	1.167	0.013	0.403	0.015
c077	19:44:36.54	-14:47:17.6	18.953	0.012	1.194	0.017	0.372	0.020
c078	19:44:56.32	-14:45:01.0	18.964	0.029	1.132	0.034	0.329	0.033
c079	19:44:50.95	-14:46:27.5	18.958	0.010	1.544	0.020	0.384	0.017
c080	19:44:56.35	-14:43:15.9	18.969	0.009	1.312	0.015	0.521	0.020

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c081	19:44:52.99	-14:48:02.2	19.046	0.016	1.248	0.035	0.513	0.040
c082	19:44:52.23	-14:47:07.1	18.929	0.017	1.261	0.021	0.549	0.023
c083	19:44:47.84	-14:47:56.3	19.051	0.010	1.278	0.018	0.514	0.018
c084	19:44:49.71	-14:44:41.8	18.863	0.017	1.487	0.022	0.718	0.022
c085	19:44:56.69	-14:47:51.3	19.088	0.015	1.148	0.021	0.475	0.027
c086	19:44:38.78	-14:47:35.7	19.048	0.011	1.326	0.022	0.478	0.019
c087	19:44:54.85	-14:47:31.6	19.068	0.010	1.346	0.020	0.402	0.018
c088	19:44:43.05	-14:41:17.1	19.037	0.007	1.142	0.011	0.366	0.025
c089	19:44:56.83	-14:40:15.3	19.046	0.010	1.278	0.017	0.362	0.018
c090	19:44:42.96	-14:46:45.9	19.093	0.015	1.343	0.032	0.478	0.028
c091	19:44:57.12	-14:44:56.6	19.043	0.017	1.333	0.027	0.428	0.029
c092	19:44:29.15	-14:40:45.6	19.054	0.008	1.208	0.012	0.379	0.014
c093	19:44:50.06	-14:44:39.3	19.075	0.009	1.304	0.015	0.482	0.018
c094	19:44:31.08	-14:47:22.6	19.087	0.010	1.220	0.019	0.396	0.023
c095	19:44:46.48	-14:40:41.8	19.077	0.007	1.219	0.011	0.401	0.017
c096	19:44:48.04	-14:46:48.3	19.078	0.019	1.544	0.035	0.463	0.037
c097	19:44:54.94	-14:43:28.8	18.981	0.009	1.672	0.017	0.516	0.018
c098	19:44:43.61	-14:45:27.3	19.110	0.009	1.167	0.016	0.398	0.017
c099	19:44:40.29	-14:45:15.3	19.069	0.008	1.375	0.015	0.513	0.016
c100	19:44:36.27	-14:43:37.1	19.084	0.008	1.334	0.014	0.495	0.017

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c101	19:44:53.45	-14:47:39.8	19.112	0.010	1.195	0.016	0.429	0.019
c102	19:44:53.37	-14:46:55.4	19.139	0.012	1.237	0.020	0.498	0.023
c103	19:44:34.56	-14:42:09.0	19.153	0.008	1.271	0.021	0.493	0.016
c104	19:44:38.65	-14:47:43.3	19.032	0.014	1.504	0.022	0.530	0.025
c105	19:44:38.31	-14:47:57.8	19.070	0.008	1.384	0.013	0.477	0.015
c106	19:44:44.36	-14:43:03.9	19.099	0.007	1.335	0.012	0.429	0.016
c107	19:44:55.16	-14:45:58.7	19.136	0.011	1.373	0.021	0.513	0.024
c108	19:44:52.23	-14:47:15.6	19.108	0.010	1.341	0.018	0.467	0.020
c109	19:44:41.46	-14:44:59.8	19.148	0.016	1.423	0.028	0.381	0.038
c110	19:44:38.43	-14:42:52.5	19.154	0.009	1.654	0.020	0.442	0.021
c111	19:44:49.23	-14:46:34.8	19.184	0.010	1.611	0.025	0.386	0.023
c112	19:44:35.48	-14:47:11.1	19.167	0.013	1.240	0.020	0.333	0.023
c113	19:44:31.61	-14:45:33.3	19.191	0.010	1.159	0.016	0.352	0.023
c114	19:44:51.11	-14:47:00.0	19.230	0.011	1.105	0.020	0.341	0.022
c115	19:44:50.52	-14:47:53.3	19.161	0.010	1.268	0.018	0.452	0.021
c116	19:44:52.89	-14:47:59.0	19.126	0.015	1.801	0.030	0.353	0.028
c117	19:44:44.66	-14:47:26.5	19.118	0.009	1.413	0.015	0.502	0.017
c118	19:44:38.41	-14:48:06.6	19.184	0.012	1.173	0.019	0.314	0.019
c119	19:44:49.29	-14:44:59.4	19.200	0.010	1.356	0.021	0.478	0.020
c120	19:44:45.71	-14:38:30.4	19.177	0.009	1.196	0.012	0.366	0.016

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c121	19:44:49.95	-14:47:49.0	19.241	0.015	1.138	0.023	0.338	0.027
c122	19:44:52.95	-14:43:29.2	19.186	0.010	1.207	0.015	0.371	0.017
c123	19:44:43.55	-14:43:24.8	19.242	0.009	1.195	0.017	0.420	0.018
c124	19:44:37.45	-14:41:14.9	19.153	0.007	1.506	0.014	0.426	0.015
c125	19:44:52.93	-14:46:47.8	19.107	0.024	1.495	0.029	0.553	0.027
c126	19:44:41.65	-14:47:33.2	19.183	0.009	1.432	0.016	0.436	0.019
c127	19:44:53.53	-14:45:14.9	19.225	0.013	1.286	0.020	0.507	0.026
c128	19:44:51.83	-14:47:29.7	19.241	0.027	1.201	0.037	0.581	0.029
c129	19:44:55.04	-14:46:58.2	19.338	0.012	1.222	0.026	0.460	0.030
c130	19:44:54.94	-14:43:12.3	19.254	0.008	1.316	0.019	0.405	0.018
c131	19:44:45.28	-14:40:10.9	19.241	0.008	1.318	0.014	0.450	0.017
c132	19:44:57.40	-14:43:28.3	19.189	0.013	1.714	0.023	0.393	0.021
c133	19:44:37.14	-14:45:32.4	19.244	0.008	1.310	0.015	0.516	0.017
c134	19:44:53.32	-14:47:47.6	19.244	0.010	1.363	0.016	0.486	0.019
c135	19:44:54.87	-14:48:14.4	19.289	0.018	1.459	0.042	0.622	0.035
c136	19:44:54.05	-14:42:45.5	19.331	0.015	1.288	0.023	0.481	0.023
c137	19:44:45.79	-14:44:34.5	19.189	0.008	1.635	0.015	0.463	0.018
c138	19:44:30.61	-14:44:01.1	19.283	0.011	1.171	0.014	0.311	0.017
c139	19:44:43.88	-14:44:31.4	19.317	0.010	1.276	0.022	0.301	0.019
c140	19:44:48.73	-14:47:15.9	19.272	0.011	1.299	0.019	0.528	0.023

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c141	19:44:51.55	−14:47:15.5	19.319	0.011	1.421	0.029	0.523	0.028
c142	19:44:55.28	−14:47:32.2	19.340	0.021	1.154	0.035	0.768	0.036
c143	19:44:53.86	−14:44:28.8	19.279	0.014	1.209	0.023	0.492	0.026
c144	19:44:52.53	−14:48:08.2	19.303	0.015	1.287	0.024	0.462	0.025
c145	19:44:44.07	−14:46:20.1	19.298	0.010	1.581	0.025	0.377	0.023
c146	19:44:55.21	−14:44:36.1	19.338	0.019	1.320	0.045	0.512	0.026
c147	19:44:43.10	−14:44:13.0	19.033	0.025	1.772	0.030	0.436	0.046
c148	19:44:48.05	−14:47:21.6	19.326	0.015	1.342	0.027	0.402	0.032
c149	19:44:55.34	−14:44:34.1	19.314	0.013	1.129	0.019	0.448	0.023
c150	19:44:48.91	−14:41:53.9	19.260	0.010	1.480	0.015	0.449	0.017
c151	19:44:48.61	−14:46:24.9	19.305	0.016	1.390	0.024	0.454	0.024
c152	19:44:34.66	−14:44:18.9	19.285	0.016	1.396	0.024	0.485	0.032
c153	19:44:53.48	−14:42:36.5	19.215	0.017	1.338	0.021	0.503	0.021
c154	19:44:37.35	−14:46:39.5	19.319	0.010	1.234	0.016	0.452	0.020
c155	19:44:36.37	−14:39:24.5	19.309	0.009	1.309	0.013	0.485	0.019
c156	19:44:37.56	−14:45:32.2	19.339	0.012	1.280	0.020	0.497	0.027
c157	19:44:40.84	−14:41:47.5	19.371	0.010	1.268	0.019	0.475	0.020
c158	19:44:55.33	−14:46:49.9	19.400	0.017	1.271	0.027	0.453	0.029
c159	19:44:54.99	−14:46:51.7	19.401	0.015	1.390	0.031	0.532	0.028
c160	19:44:46.29	−14:47:56.8	19.312	0.015	1.673	0.028	0.389	0.025

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c161	19:44:50.59	-14:47:33.6	19.409	0.016	1.339	0.032	0.513	0.026
c162	19:44:52.40	-14:47:51.4	19.409	0.021	1.106	0.029	0.485	0.038
c163	19:44:51.81	-14:47:45.1	19.386	0.020	1.713	0.048	0.379	0.041
c164	19:44:42.93	-14:47:22.0	19.397	0.011	1.416	0.019	0.847	0.023
c165	19:44:52.01	-14:47:47.1	19.417	0.013	1.596	0.031	0.422	0.024
c166	19:44:52.69	-14:40:08.5	19.420	0.015	1.207	0.027	0.425	0.024
c167	19:44:57.25	-14:47:42.5	19.426	0.017	1.344	0.029	0.608	0.028
c168	19:44:48.02	-14:42:21.9	19.385	0.013	1.353	0.018	0.537	0.019
c169	19:44:42.87	-14:46:35.7	19.421	0.010	1.287	0.017	0.501	0.020
c170	19:44:53.64	-14:44:29.5	19.392	0.013	1.379	0.018	0.451	0.021
c171	19:44:42.49	-14:42:36.7	19.456	0.011	1.248	0.020	0.412	0.023
c172	19:44:42.13	-14:45:22.1	19.414	0.023	1.112	0.029	0.317	0.025
c173	19:44:43.28	-14:44:54.1	19.528	0.025	1.151	0.033	0.388	0.030
c174	19:44:53.07	-14:47:56.4	19.430	0.013	1.788	0.029	0.408	0.024
c175	19:44:49.15	-14:45:45.4	19.381	0.018	1.407	0.025	0.510	0.032
c176	19:44:33.42	-14:47:45.9	19.441	0.015	1.536	0.030	0.325	0.025
c177	19:44:51.28	-14:47:01.1	19.495	0.012	1.247	0.024	0.443	0.026
c178	19:44:42.45	-14:45:32.1	19.424	0.011	1.522	0.020	0.469	0.019
c179	19:44:57.09	-14:48:00.9	19.356	0.021	1.471	0.025	0.566	0.032
c180	19:44:30.75	-14:47:25.1	19.458	0.011	1.306	0.017	0.420	0.023

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c181	19:44:42.17	-14:47:37.3	19.379	0.033	1.642	0.051	0.936	0.057
c182	19:44:53.79	-14:46:59.1	19.548	0.011	1.482	0.035	0.549	0.026
c183	19:44:48.72	-14:45:56.0	19.536	0.012	1.373	0.021	0.687	0.025
c184	19:44:52.80	-14:45:28.5	19.513	0.012	1.553	0.023	0.436	0.021
c185	19:44:46.76	-14:47:25.9	19.552	0.015	1.181	0.023	0.395	0.026
c186	19:44:48.86	-14:47:36.6	19.508	0.015	1.590	0.026	0.701	0.026
c187	19:44:52.88	-14:43:42.0	19.596	0.013	1.265	0.030	0.404	0.026
c188	19:44:38.28	-14:43:59.7	19.507	0.011	1.502	0.018	0.480	0.021
c189	19:44:41.10	-14:44:42.5	19.567	0.013	1.121	0.017	0.375	0.024
c190	19:44:48.90	-14:45:18.5	19.593	0.012	1.128	0.018	0.398	0.022
c191	19:44:36.76	-14:42:53.2	19.569	0.011	1.325	0.020	0.584	0.022
c192	19:44:51.27	-14:48:05.9	19.597	0.017	1.265	0.026	0.454	0.032
c193	19:44:52.35	-14:43:22.8	19.616	0.012	1.381	0.029	0.382	0.021
c194	19:44:52.19	-14:45:59.8	19.622	0.014	1.310	0.027	0.564	0.030
c195	19:44:39.03	-14:36:30.1	19.600	0.010	1.278	0.016	0.600	0.021
c196	19:44:35.77	-14:42:51.1	19.552	0.023	1.269	0.026	0.328	0.036
c197	19:44:44.22	-14:47:56.2	19.660	0.013	1.104	0.022	0.369	0.023
c198	19:44:54.26	-14:42:45.0	19.696	0.018	1.130	0.025	0.499	0.024
c199	19:44:54.76	-14:47:22.2	19.617	0.011	1.720	0.029	0.330	0.029
c200	19:44:48.68	-14:42:00.8	19.566	0.010	1.694	0.023	0.451	0.024

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c201	19:44:53.08	-14:44:35.3	19.680	0.012	1.217	0.023	0.382	0.024
c202	19:44:54.62	-14:45:39.1	19.700	0.014	1.122	0.023	0.346	0.044
c203	19:44:55.22	-14:46:16.4	19.555	0.020	1.364	0.024	0.529	0.026
c204	19:44:47.53	-14:43:11.5	19.638	0.013	1.744	0.024	0.372	0.034
c205	19:44:43.86	-14:44:52.6	19.644	0.011	1.569	0.022	0.322	0.021
c206	19:44:50.98	-14:48:03.7	19.694	0.017	1.536	0.031	0.380	0.029
c207	19:44:39.35	-14:42:18.0	19.688	0.016	1.601	0.040	0.464	0.025
c208	19:44:33.99	-14:45:17.3	19.750	0.013	1.404	0.033	0.417	0.027
c209	19:44:47.15	-14:42:09.2	19.593	0.016	1.848	0.028	0.507	0.024
c210	19:44:45.89	-14:46:53.1	19.785	0.018	1.142	0.025	0.456	0.031
c211	19:44:50.86	-14:47:05.8	19.746	0.014	1.327	0.025	0.395	0.027
c212	19:44:50.32	-14:45:35.7	19.737	0.023	1.422	0.033	0.514	0.026
c213	19:44:39.36	-14:44:37.3	19.775	0.014	1.351	0.024	0.490	0.027
c214	19:44:56.64	-14:44:42.2	19.808	0.016	2.057	0.048	0.341	0.030
c215	19:44:29.80	-14:43:26.3	19.786	0.015	1.555	0.028	0.343	0.026
c216	19:44:44.58	-14:45:44.4	19.829	0.012	1.312	0.021	0.489	0.024
c217	19:44:52.05	-14:43:40.1	19.869	0.014	1.518	0.035	0.704	0.035
c218	19:44:40.79	-14:48:08.3	19.830	0.015	1.614	0.033	0.544	0.028
c219	19:44:29.19	-14:45:19.0	19.864	0.013	1.200	0.021	0.453	0.029
c220	19:44:51.48	-14:45:01.5	19.970	0.014	1.389	0.026	0.456	0.027

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c221	19:44:47.44	-14:45:47.5	19.920	0.021	1.597	0.040	0.345	0.043
c222	19:44:53.31	-14:44:40.5	19.975	0.015	1.257	0.028	0.552	0.031
c223	19:44:40.67	-14:42:18.7	19.996	0.014	1.867	0.039	0.852	0.030
c224	19:44:44.82	-14:44:47.0	19.961	0.018	1.217	0.033	0.424	0.035
c225	19:44:51.73	-14:46:34.8	19.998	0.019	1.245	0.034	0.704	0.033
c226	19:44:49.10	-14:40:27.6	20.060	0.013	1.117	0.021	0.553	0.030
c227	19:44:41.90	-14:47:36.8	20.031	0.019	1.662	0.049	0.535	0.035
c228	19:44:48.80	-14:47:21.1	20.030	0.019	1.466	0.032	0.398	0.033
c229	19:44:31.84	-14:46:05.1	20.015	0.013	1.492	0.025	0.541	0.036
c230	19:44:53.99	-14:47:56.2	20.037	0.052	1.244	0.060	0.605	0.049
c231	19:44:36.48	-14:42:01.3	20.191	0.016	1.517	0.036	0.370	0.036
c232	19:44:56.90	-14:44:20.6	20.153	0.020	1.497	0.033	0.522	0.043
c233	19:44:55.04	-14:39:09.1	20.389	0.020	1.743	0.036	0.506	0.035
c234	19:44:56.16	-14:41:10.9	20.500	0.020	1.670	0.042	0.368	0.043
c235	19:44:34.94	-14:43:27.3	20.808	0.027	1.836	0.074	0.515	0.053
c236	19:44:58.49	-14:46:13.2	17.882	0.013	1.194	0.024	0.465	0.024
c237	19:45:09.13	-14:48:06.5	18.099	0.010	1.373	0.036	0.466	0.029
c238	19:44:58.61	-14:44:29.1	18.456	0.011	1.183	0.033	0.458	0.030
c239	19:45:14.31	-14:48:05.3	18.447	0.006	1.315	0.013	0.462	0.017
c240	19:45:24.27	-14:45:24.3	18.640	0.013	1.171	0.045	0.414	0.039

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c241	19:45:08.56	-14:44:26.0	18.469	0.008	1.577	0.015	0.509	0.016
c242	19:45:19.40	-14:42:24.5	18.601	0.012	1.276	0.021	0.418	0.021
c243	19:45:07.91	-14:47:14.9	18.575	0.007	1.431	0.014	0.522	0.019
c244	19:45:15.09	-14:45:20.4	18.646	0.006	1.272	0.014	0.401	0.015
c245	19:45:10.35	-14:46:13.2	18.593	0.006	1.368	0.012	0.493	0.014
c246	19:45:18.37	-14:38:28.9	18.555	0.006	1.563	0.010	0.470	0.011
c247	19:45:04.81	-14:46:27.4	18.686	0.011	1.495	0.030	0.359	0.031
c248	19:45:12.30	-14:46:43.0	18.623	0.007	1.407	0.014	0.567	0.015
c249	19:45:11.80	-14:41:28.9	18.681	0.007	1.455	0.016	0.365	0.017
c250	19:45:13.71	-14:47:01.8	18.694	0.007	1.400	0.015	0.517	0.019
c251	19:44:58.69	-14:45:16.0	18.738	0.010	1.141	0.019	0.313	0.019
c252	19:44:58.76	-14:47:21.4	18.693	0.024	1.205	0.034	0.309	0.049
c253	19:45:16.34	-14:44:19.7	18.741	0.008	1.200	0.015	0.446	0.016
c254	19:45:25.66	-14:44:52.3	18.766	0.007	1.214	0.015	0.431	0.017
c255	19:44:58.93	-14:44:57.6	18.702	0.010	1.600	0.019	0.523	0.020
c256	19:45:02.37	-14:41:03.1	18.760	0.005	1.140	0.009	0.318	0.013
c257	19:45:04.64	-14:39:59.0	18.675	0.007	1.496	0.013	0.418	0.014
c258	19:45:07.05	-14:44:25.8	18.693	0.011	1.519	0.019	0.503	0.014
c259	19:45:04.91	-14:46:56.0	18.774	0.009	1.420	0.022	0.488	0.020
c260	19:44:59.04	-14:43:37.9	18.808	0.009	1.298	0.024	0.399	0.019

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c261	19:45:14.55	−14:46:57.1	18.749	0.008	1.407	0.015	0.494	0.016
c262	19:45:03.27	−14:46:00.4	18.829	0.011	1.220	0.023	0.384	0.021
c263	19:45:23.72	−14:40:36.7	18.802	0.006	1.211	0.010	0.394	0.013
c264	19:45:07.16	−14:45:30.6	18.818	0.009	1.130	0.014	0.497	0.018
c265	19:45:05.95	−14:42:48.5	18.805	0.008	1.263	0.013	0.463	0.018
c266	19:45:03.20	−14:44:15.2	18.807	0.007	1.505	0.017	0.483	0.018
c267	19:45:04.16	−14:47:53.0	18.871	0.010	1.384	0.022	0.488	0.026
c268	19:45:08.17	−14:45:01.3	18.849	0.008	1.390	0.017	0.494	0.019
c269	19:45:04.64	−14:40:18.2	18.893	0.007	1.187	0.015	0.384	0.019
c270	19:45:00.89	−14:43:25.5	18.805	0.007	1.487	0.014	0.480	0.014
c271	19:45:00.88	−14:47:46.3	18.918	0.013	1.392	0.038	0.454	0.036
c272	19:44:58.59	−14:48:00.8	18.712	0.016	1.656	0.031	0.562	0.022
c273	19:45:11.19	−14:47:37.3	18.880	0.008	1.278	0.016	0.488	0.019
c274	19:45:05.72	−14:40:35.7	18.866	0.007	1.319	0.011	0.429	0.013
c275	19:45:22.52	−14:44:46.6	18.925	0.008	1.251	0.018	0.473	0.018
c276	19:45:07.67	−14:47:15.2	18.894	0.007	1.332	0.016	0.586	0.015
c277	19:45:05.87	−14:43:29.2	18.921	0.008	1.602	0.027	0.489	0.018
c278	19:45:24.56	−14:46:49.2	18.887	0.011	1.325	0.018	0.518	0.020
c279	19:45:07.73	−14:43:53.0	18.907	0.012	1.513	0.029	0.542	0.021
c280	19:45:07.13	−14:46:10.7	18.877	0.020	1.260	0.032	0.497	0.036

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c281	19:45:10.65	-14:48:12.6	18.962	0.009	1.371	0.027	0.478	0.022
c282	19:45:02.30	-14:43:39.7	18.957	0.010	1.263	0.020	0.445	0.024
c283	19:45:09.73	-14:47:41.8	18.728	0.019	1.734	0.024	0.502	0.015
c284	19:45:09.19	-14:47:18.0	18.844	0.012	1.631	0.024	0.545	0.022
c285	19:45:25.42	-14:43:30.8	18.884	0.007	1.636	0.015	0.461	0.015
c286	19:45:10.58	-14:46:09.4	18.946	0.008	1.258	0.015	0.438	0.017
c287	19:45:02.79	-14:46:09.7	18.951	0.009	1.254	0.019	0.432	0.018
c288	19:45:01.53	-14:46:25.7	19.004	0.011	1.188	0.024	0.318	0.026
c289	19:45:11.82	-14:47:10.7	18.905	0.010	1.503	0.016	0.740	0.041
c290	19:44:58.76	-14:42:57.3	18.980	0.010	1.266	0.019	0.442	0.020
c291	19:45:01.31	-14:41:11.5	18.983	0.013	1.427	0.029	0.475	0.030
c292	19:45:26.69	-14:45:53.6	18.988	0.009	1.128	0.016	0.446	0.020
c293	19:45:14.63	-14:44:10.6	18.988	0.011	1.226	0.021	0.661	0.020
c294	19:45:02.02	-14:47:16.3	18.903	0.009	1.469	0.016	0.501	0.017
c295	19:45:05.11	-14:47:23.7	18.854	0.018	1.446	0.022	0.457	0.019
c296	19:45:05.82	-14:47:58.9	19.007	0.014	1.200	0.026	0.410	0.029
c297	19:45:16.36	-14:44:11.6	18.984	0.007	1.265	0.015	0.439	0.015
c298	19:45:00.55	-14:44:35.2	18.883	0.011	1.391	0.017	0.567	0.027
c299	19:44:59.45	-14:44:32.7	18.963	0.014	1.269	0.022	0.392	0.018
c300	19:45:04.62	-14:46:18.9	19.047	0.014	1.192	0.035	0.389	0.035

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c301	19:45:24.28	-14:43:13.6	18.970	0.007	1.518	0.016	0.385	0.020
c302	19:45:08.14	-14:43:56.0	18.974	0.008	1.381	0.014	0.496	0.016
c303	19:45:06.86	-14:43:23.3	19.020	0.010	1.181	0.016	0.379	0.024
c304	19:45:08.03	-14:47:20.2	19.018	0.007	1.300	0.015	0.430	0.018
c305	19:45:21.96	-14:42:45.7	19.024	0.008	1.355	0.015	0.558	0.018
c306	19:44:59.82	-14:45:48.6	19.015	0.008	1.492	0.016	0.494	0.019
c307	19:45:00.53	-14:45:24.3	19.092	0.012	1.215	0.026	0.415	0.023
c308	19:45:10.15	-14:42:52.4	19.043	0.013	1.399	0.025	0.394	0.029
c309	19:44:58.79	-14:43:49.3	19.012	0.019	1.228	0.024	0.387	0.023
c310	19:45:15.38	-14:47:00.5	18.971	0.008	1.616	0.015	0.507	0.015
c311	19:45:10.61	-14:45:02.8	19.002	0.007	1.673	0.017	0.522	0.018
c312	19:45:03.83	-14:47:30.3	19.049	0.009	1.606	0.027	0.502	0.020
c313	19:45:09.08	-14:46:14.8	19.047	0.011	1.490	0.028	0.931	0.027
c314	19:45:00.89	-14:46:23.9	19.096	0.015	1.337	0.030	0.468	0.033
c315	19:45:13.10	-14:42:50.8	19.067	0.009	1.462	0.022	0.514	0.017
c316	19:45:03.21	-14:42:32.0	19.037	0.009	1.409	0.015	0.518	0.017
c317	19:45:09.71	-14:46:27.0	19.096	0.009	1.139	0.016	0.385	0.021
c318	19:44:59.67	-14:41:23.3	19.062	0.008	1.295	0.015	0.364	0.015
c319	19:45:05.64	-14:43:47.4	19.073	0.008	1.590	0.024	0.498	0.018
c320	19:45:18.27	-14:39:58.1	19.116	0.007	1.116	0.011	0.339	0.015

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c321	19:45:11.76	-14:42:00.7	19.083	0.008	1.293	0.015	0.472	0.017
c322	19:45:06.64	-14:40:42.7	19.082	0.008	1.247	0.012	0.412	0.015
c323	19:45:06.95	-14:47:41.6	19.099	0.024	1.229	0.034	0.649	0.039
c324	19:45:10.46	-14:43:25.3	19.056	0.007	1.448	0.014	0.533	0.016
c325	19:45:10.87	-14:46:23.4	19.034	0.013	1.610	0.022	0.416	0.020
c326	19:45:09.59	-14:46:56.6	19.115	0.009	1.240	0.017	0.477	0.019
c327	19:45:04.47	-14:43:34.4	19.079	0.012	1.682	0.030	0.373	0.025
c328	19:45:11.09	-14:45:26.6	19.046	0.007	1.584	0.016	0.467	0.017
c329	19:45:03.47	-14:46:17.0	19.059	0.009	1.490	0.017	0.515	0.018
c330	19:45:19.24	-14:46:02.6	19.067	0.007	1.624	0.018	0.487	0.018
c331	19:45:02.69	-14:43:18.3	19.073	0.016	1.209	0.030	0.507	0.025
c332	19:45:05.25	-14:48:03.3	19.142	0.009	1.345	0.021	0.441	0.022
c333	19:45:15.54	-14:43:25.4	19.148	0.007	1.154	0.013	0.372	0.017
c334	19:45:19.94	-14:46:53.5	19.125	0.009	1.433	0.018	0.499	0.019
c335	19:45:05.82	-14:34:50.8	19.072	0.007	1.512	0.013	0.382	0.018
c336	19:44:59.69	-14:43:34.3	19.140	0.010	1.463	0.025	0.799	0.023
c337	19:45:09.12	-14:47:38.4	19.127	0.009	1.458	0.018	0.476	0.020
c338	19:45:04.35	-14:46:01.8	19.123	0.009	1.558	0.021	0.504	0.021
c339	19:45:06.81	-14:46:47.0	18.975	0.014	1.691	0.022	0.565	0.023
c340	19:44:58.98	-14:47:10.0	19.174	0.011	1.179	0.021	0.399	0.021

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c341	19:45:00.42	-14:46:38.2	19.175	0.016	1.150	0.029	0.345	0.029
c342	19:45:16.70	-14:47:21.6	19.273	0.014	1.480	0.033	0.609	0.044
c343	19:45:07.11	-14:48:13.0	19.070	0.009	1.648	0.020	0.517	0.019
c344	19:45:02.37	-14:48:06.7	19.058	0.021	1.607	0.028	0.447	0.023
c345	19:45:03.00	-14:43:27.4	19.183	0.010	1.504	0.028	0.463	0.017
c346	19:45:14.20	-14:47:24.8	19.199	0.011	1.521	0.042	0.554	0.022
c347	19:44:59.87	-14:46:12.6	19.147	0.011	1.412	0.019	0.526	0.019
c348	19:45:15.21	-14:45:44.7	18.954	0.026	1.413	0.031	0.543	0.032
c349	19:45:01.78	-14:46:25.3	19.223	0.013	1.454	0.032	0.585	0.032
c350	19:45:13.86	-14:47:11.3	19.183	0.010	1.330	0.020	0.511	0.019
c351	19:45:14.19	-14:46:25.4	19.192	0.009	1.418	0.019	0.540	0.023
c352	19:45:09.15	-14:40:40.5	19.199	0.008	1.272	0.013	0.386	0.016
c353	19:45:04.68	-14:46:49.6	19.106	0.013	1.732	0.021	0.448	0.027
c354	19:45:03.60	-14:42:55.0	19.184	0.010	1.332	0.017	0.435	0.019
c355	19:45:08.97	-14:47:43.6	19.229	0.012	1.535	0.032	0.400	0.031
c356	19:45:11.04	-14:46:59.9	19.183	0.011	1.422	0.020	0.406	0.023
c357	19:45:27.02	-14:37:30.7	19.187	0.010	1.236	0.016	0.339	0.015
c358	19:45:15.85	-14:47:04.4	19.222	0.012	1.438	0.024	0.464	0.024
c359	19:45:06.26	-14:45:05.2	19.211	0.009	1.415	0.018	0.457	0.020
c360	19:45:03.56	-14:46:22.8	19.219	0.013	1.311	0.022	0.474	0.025

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c361	19:44:59.21	-14:47:14.1	19.255	0.014	1.788	0.039	0.554	0.030
c362	19:45:04.63	-14:44:18.9	19.101	0.016	1.339	0.021	0.741	0.023
c363	19:45:03.00	-14:47:08.0	19.172	0.025	1.656	0.045	0.497	0.037
c364	19:45:14.86	-14:43:42.8	19.243	0.009	1.459	0.021	0.511	0.022
c365	19:45:13.12	-14:46:03.2	19.249	0.016	1.124	0.033	0.455	0.026
c366	19:45:04.69	-14:42:53.4	19.227	0.012	1.494	0.020	0.480	0.019
c367	19:45:07.56	-14:44:48.0	19.264	0.008	1.340	0.018	0.352	0.022
c368	19:45:08.56	-14:44:21.4	19.295	0.010	1.208	0.020	0.527	0.026
c369	19:45:24.88	-14:40:18.9	19.282	0.008	1.206	0.013	0.444	0.019
c370	19:45:07.54	-14:48:10.8	19.140	0.019	1.612	0.027	0.566	0.022
c371	19:45:00.66	-14:47:49.3	19.145	0.011	1.521	0.022	0.657	0.050
c372	19:45:07.93	-14:45:20.3	19.233	0.010	1.679	0.019	0.447	0.019
c373	19:45:09.75	-14:41:46.8	19.399	0.014	1.801	0.071	0.648	0.038
c374	19:45:01.98	-14:47:14.4	19.270	0.012	1.588	0.023	0.581	0.023
c375	19:45:10.92	-14:40:39.5	19.308	0.009	1.232	0.014	0.338	0.016
c376	19:45:08.81	-14:41:49.4	19.352	0.009	1.110	0.014	0.334	0.018
c377	19:45:02.05	-14:47:27.0	19.219	0.023	1.800	0.039	0.493	0.020
c378	19:44:58.57	-14:47:31.2	19.249	0.014	1.657	0.026	0.526	0.020
c379	19:45:00.91	-14:48:12.7	19.398	0.015	1.557	0.030	0.605	0.065
c380	19:45:08.41	-14:45:08.7	19.399	0.009	1.161	0.018	0.398	0.021

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c381	19:44:59.36	-14:45:49.8	19.340	0.014	1.414	0.027	0.447	0.027
c382	19:45:06.06	-14:45:31.0	19.385	0.015	1.276	0.029	0.606	0.038
c383	19:44:59.74	-14:45:52.7	19.114	0.039	2.112	0.050	0.411	0.023
c384	19:45:02.50	-14:47:19.9	19.396	0.012	1.301	0.023	0.607	0.024
c385	19:45:03.47	-14:43:49.4	19.396	0.009	1.284	0.016	0.469	0.020
c386	19:45:11.88	-14:45:21.8	19.420	0.011	1.209	0.019	0.431	0.022
c387	19:44:59.04	-14:46:51.5	19.460	0.014	1.278	0.028	0.469	0.030
c388	19:44:58.99	-14:47:35.0	19.425	0.015	1.605	0.038	0.356	0.035
c389	19:45:11.80	-14:46:58.9	19.360	0.011	1.758	0.023	0.508	0.027
c390	19:45:09.70	-14:45:28.9	19.414	0.010	1.183	0.018	0.420	0.021
c391	19:45:01.90	-14:46:08.3	19.373	0.013	1.575	0.026	0.454	0.024
c392	19:45:00.37	-14:47:51.4	19.353	0.012	1.543	0.022	0.499	0.021
c393	19:44:58.60	-14:48:12.8	19.379	0.015	1.697	0.031	0.433	0.024
c394	19:45:05.85	-14:48:13.6	19.352	0.018	1.727	0.029	0.525	0.024
c395	19:44:59.04	-14:38:38.5	19.388	0.009	1.403	0.015	0.408	0.018
c396	19:45:04.33	-14:47:56.6	19.446	0.011	1.227	0.019	0.409	0.020
c397	19:45:21.58	-14:44:41.3	19.413	0.009	1.474	0.018	0.480	0.021
c398	19:44:59.32	-14:43:22.2	19.415	0.015	1.192	0.021	0.446	0.026
c399	19:45:00.35	-14:48:09.4	19.412	0.031	1.410	0.065	0.512	0.045
c400	19:45:01.80	-14:46:55.2	19.421	0.011	1.752	0.026	0.418	0.025

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c401	19:45:12.75	−14:48:03.3	19.537	0.012	1.364	0.027	0.392	0.025
c402	19:45:02.58	−14:46:04.0	19.506	0.010	1.161	0.021	0.331	0.019
c403	19:45:07.04	−14:46:56.9	19.519	0.015	1.166	0.027	0.351	0.030
c404	19:45:00.49	−14:47:52.9	19.438	0.010	1.611	0.021	0.541	0.023
c405	19:45:06.37	−14:47:04.5	19.496	0.011	1.405	0.024	0.506	0.022
c406	19:45:00.48	−14:38:43.7	19.523	0.009	1.142	0.016	0.337	0.019
c407	19:45:00.67	−14:46:10.7	19.567	0.014	1.323	0.044	0.526	0.039
c408	19:45:00.76	−14:47:03.5	19.483	0.015	1.440	0.024	0.535	0.038
c409	19:45:15.86	−14:40:45.2	19.485	0.009	1.411	0.015	0.359	0.019
c410	19:44:59.46	−14:45:30.9	19.372	0.028	1.523	0.036	0.494	0.045
c411	19:45:07.11	−14:44:25.0	19.551	0.012	1.652	0.028	0.821	0.026
c412	19:45:06.96	−14:39:33.2	19.496	0.009	1.413	0.015	0.732	0.018
c413	19:44:59.82	−14:47:33.7	19.557	0.025	1.308	0.037	0.555	0.029
c414	19:45:12.52	−14:48:15.2	19.567	0.014	1.280	0.027	0.555	0.029
c415	19:45:02.66	−14:47:33.7	19.548	0.011	1.452	0.023	0.575	0.024
c416	19:45:09.85	−14:46:13.4	19.554	0.014	1.196	0.021	0.464	0.023
c417	19:44:58.16	−14:47:14.9	19.577	0.020	1.579	0.053	0.436	0.034
c418	19:45:08.12	−14:44:29.5	19.558	0.009	1.299	0.017	0.516	0.024
c419	19:45:05.34	−14:45:39.9	19.430	0.015	1.892	0.024	0.312	0.028
c420	19:45:22.30	−14:45:49.3	19.613	0.012	1.222	0.020	0.354	0.025

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c421	19:45:10.14	-14:47:41.9	19.616	0.013	1.422	0.026	0.526	0.026
c422	19:45:11.33	-14:48:07.6	19.566	0.011	1.781	0.021	0.448	0.022
c423	19:45:02.08	-14:44:11.7	19.532	0.015	1.677	0.026	0.616	0.032
c424	19:45:01.96	-14:47:33.9	19.666	0.018	1.218	0.031	0.334	0.034
c425	19:45:04.93	-14:43:31.4	19.709	0.014	1.526	0.034	0.480	0.029
c426	19:45:10.09	-14:48:17.3	19.706	0.013	1.231	0.028	0.558	0.028
c427	19:45:02.90	-14:46:27.9	19.531	0.031	1.685	0.044	0.484	0.042
c428	19:45:10.39	-14:45:49.3	19.408	0.023	1.733	0.029	0.535	0.029
c429	19:45:19.99	-14:46:13.2	19.718	0.013	1.194	0.022	0.392	0.024
c430	19:44:59.12	-14:45:17.1	19.765	0.010	1.198	0.033	0.401	0.029
c431	19:45:08.41	-14:46:37.4	19.741	0.012	1.293	0.020	0.521	0.025
c432	19:45:03.48	-14:47:47.0	19.909	0.045	1.108	0.070	0.541	0.070
c433	19:45:20.49	-14:40:51.7	19.969	0.014	1.276	0.023	0.402	0.024
c434	19:44:58.27	-14:47:15.4	19.907	0.030	2.181	0.083	0.494	0.043
c435	19:45:04.92	-14:44:04.5	20.018	0.019	1.803	0.046	0.419	0.041
c436	19:45:02.32	-14:43:01.7	20.186	0.020	1.426	0.042	0.378	0.040
c437	19:45:23.50	-14:45:26.2	20.126	0.017	1.850	0.036	0.485	0.032
c438	19:45:02.38	-14:44:51.6	20.438	0.022	1.499	0.048	0.615	0.043
c439	19:45:30.23	-14:43:51.1	17.758	0.005	1.175	0.008	0.410	0.011
c440	19:45:56.51	-14:45:24.2	18.276	0.009	1.106	0.018	0.370	0.019

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c441	19:45:55.02	−14:41:43.4	18.336	0.004	1.485	0.008	0.519	0.010
c442	19:45:31.86	−14:45:07.6	18.462	0.005	1.379	0.008	0.521	0.011
c443	19:45:33.48	−14:46:31.7	18.936	0.006	1.157	0.011	0.429	0.013
c444	19:45:29.72	−14:39:39.9	18.897	0.007	1.483	0.011	0.515	0.015
c445	19:45:44.75	−14:44:37.7	19.010	0.006	1.137	0.010	0.332	0.013
c446	19:45:38.71	−14:41:08.6	19.028	0.011	1.174	0.018	0.395	0.021
c447	19:45:32.64	−14:46:14.0	18.993	0.007	1.305	0.011	0.538	0.014
c448	19:45:41.06	−14:44:49.5	19.009	0.006	1.393	0.011	0.523	0.013
c449	19:45:29.79	−14:42:40.0	19.103	0.007	1.120	0.011	0.414	0.015
c450	19:45:37.54	−14:48:01.9	18.935	0.006	1.785	0.011	0.482	0.013
c451	19:45:43.20	−14:45:45.0	19.036	0.007	1.430	0.014	0.506	0.018
c452	19:45:51.50	−14:48:26.4	19.087	0.008	1.530	0.019	0.468	0.017
c453	19:45:30.01	−14:47:51.9	19.167	0.007	1.118	0.011	0.411	0.022
c454	19:45:36.44	−14:44:17.6	19.093	0.006	1.559	0.012	0.524	0.013
c455	19:45:46.18	−14:45:45.0	19.049	0.006	1.852	0.014	0.393	0.015
c456	19:45:42.40	−14:45:14.2	19.141	0.006	1.426	0.013	0.576	0.014
c457	19:45:41.62	−14:42:41.8	19.210	0.007	1.394	0.013	0.479	0.015
c458	19:45:36.74	−14:41:56.9	19.457	0.008	1.181	0.013	0.435	0.018
c459	19:45:37.97	−14:40:28.4	19.523	0.008	1.120	0.013	0.353	0.017
c460	19:45:47.84	−14:45:37.7	19.573	0.008	1.271	0.014	0.471	0.017

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c461	19:45:36.67	-14:47:51.7	19.596	0.009	1.708	0.018	0.459	0.019
c462	19:45:32.30	-14:44:10.1	19.950	0.012	1.322	0.021	0.369	0.020
c463	19:45:28.91	-14:48:10.6	19.914	0.029	1.174	0.032	0.398	0.027
c464	19:45:47.84	-14:41:32.5	20.737	0.024	1.781	0.050	0.499	0.054
c465	19:45:52.57	-14:45:07.9	20.967	0.025	1.931	0.064	0.415	0.048
c466	19:46:09.54	-14:42:17.7	19.326	0.009	1.594	0.015	0.531	0.016
c467	19:46:02.64	-14:35:03.6	19.384	0.009	1.271	0.014	0.339	0.019
c468	19:46:05.11	-14:36:51.0	19.569	0.009	1.292	0.028	0.399	0.018
c469	19:46:04.76	-14:41:40.5	19.780	0.010	1.372	0.017	0.333	0.019
c470	19:46:02.00	-14:40:58.5	20.006	0.012	1.126	0.017	0.692	0.023
c471	19:43:55.07	-14:52:58.0	18.941	0.007	1.272	0.011	0.472	0.014
c472	19:43:53.18	-14:52:37.9	19.197	0.008	1.336	0.013	0.479	0.016
c473	19:43:52.78	-14:58:29.5	19.248	0.010	1.161	0.016	0.420	0.020
c474	19:43:46.12	-14:55:21.7	19.223	0.009	1.167	0.013	0.327	0.017
c475	19:43:52.36	-14:53:37.0	19.574	0.011	1.384	0.018	0.454	0.021
c476	19:44:24.18	-14:49:42.4	18.450	0.007	1.143	0.011	0.403	0.012
c477	19:44:01.26	-14:53:17.7	18.503	0.005	1.319	0.009	0.499	0.010
c478	19:44:19.37	-14:51:30.5	18.829	0.008	1.247	0.012	0.518	0.015
c479	19:44:17.31	-14:50:56.0	18.963	0.007	1.263	0.012	0.440	0.014
c480	19:44:16.66	-14:57:01.7	19.015	0.007	1.151	0.010	0.346	0.018

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c481	19:44:11.60	-14:53:58.6	18.963	0.007	1.290	0.011	0.545	0.014
c482	19:44:18.50	-14:52:40.0	19.047	0.008	1.318	0.013	0.495	0.013
c483	19:44:23.07	-14:48:19.6	19.084	0.009	1.311	0.014	0.472	0.024
c484	19:44:22.36	-14:48:29.0	19.158	0.009	1.166	0.015	0.335	0.018
c485	19:44:27.10	-14:52:05.0	19.168	0.009	1.519	0.015	0.509	0.016
c486	19:44:08.29	-14:57:04.4	19.270	0.008	1.162	0.012	0.440	0.015
c487	19:44:18.00	-14:50:31.1	19.299	0.008	1.127	0.015	0.433	0.017
c488	19:44:12.36	-14:51:59.5	19.264	0.009	1.413	0.016	0.469	0.019
c489	19:44:07.38	-14:48:40.4	19.296	0.010	1.231	0.014	0.424	0.019
c490	19:44:26.34	-14:55:57.3	19.268	0.008	1.496	0.014	0.454	0.017
c491	19:44:04.22	-14:56:19.1	19.379	0.009	1.209	0.014	0.398	0.017
c492	19:44:14.65	-14:56:39.5	19.343	0.009	1.464	0.016	0.490	0.016
c493	19:44:25.64	-14:52:26.5	19.393	0.009	1.143	0.014	0.427	0.019
c494	19:44:20.32	-14:49:56.0	19.340	0.009	1.390	0.014	0.472	0.017
c495	19:44:22.88	-14:54:51.6	19.422	0.010	1.230	0.021	0.479	0.019
c496	19:44:17.48	-14:51:23.0	19.379	0.012	1.190	0.015	0.361	0.016
c497	19:44:12.77	-14:55:22.8	19.414	0.010	1.225	0.015	0.570	0.020
c498	19:44:21.77	-15:00:36.2	19.419	0.010	1.199	0.015	0.370	0.020
c499	19:44:16.20	-14:54:10.4	19.384	0.009	1.439	0.015	0.427	0.019
c500	19:44:15.91	-14:50:40.1	19.494	0.010	1.151	0.014	0.446	0.018

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c501	19:44:23.21	-14:52:52.2	19.487	0.010	1.201	0.015	0.428	0.018
c502	19:44:20.51	-14:49:35.0	19.444	0.009	1.449	0.015	0.518	0.021
c503	19:44:06.96	-14:54:08.6	19.420	0.009	1.849	0.018	0.355	0.019
c504	19:44:26.67	-14:51:34.1	19.424	0.011	1.822	0.019	0.408	0.018
c505	19:44:24.86	-14:57:36.9	19.495	0.009	1.347	0.015	0.500	0.021
c506	19:44:22.32	-14:53:31.0	19.428	0.010	1.704	0.017	0.489	0.020
c507	19:44:15.03	-14:52:52.2	19.666	0.010	1.249	0.016	0.419	0.021
c508	19:44:00.96	-14:51:45.8	19.698	0.011	1.226	0.017	0.426	0.022
c509	19:43:58.39	-14:59:25.7	19.598	0.010	1.511	0.020	0.372	0.056
c510	19:44:14.77	-14:57:17.9	19.737	0.012	1.263	0.018	0.442	0.023
c511	19:44:26.19	-15:01:08.8	19.737	0.014	1.231	0.020	0.409	0.025
c512	19:44:21.62	-14:54:18.5	19.696	0.011	1.490	0.018	0.462	0.022
c513	19:44:17.02	-14:56:36.5	19.909	0.014	1.349	0.023	0.441	0.028
c514	19:44:21.42	-14:56:42.9	20.000	0.013	1.588	0.026	0.303	0.028
c515	19:44:25.11	-14:50:33.4	20.336	0.017	1.590	0.036	0.332	0.037
c516	19:44:55.76	-14:50:21.9	18.390	0.013	1.389	0.026	0.518	0.020
c517	19:44:41.48	-14:55:21.6	18.383	0.005	1.265	0.008	0.474	0.012
c518	19:44:48.40	-14:53:10.4	18.516	0.007	1.460	0.014	0.534	0.016
c519	19:44:53.78	-14:51:27.7	18.630	0.026	1.370	0.054	0.490	0.049
c520	19:44:54.95	-14:49:34.6	18.686	0.011	1.105	0.018	0.492	0.020

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c521	19:44:49.11	−14:49:51.3	18.544	0.008	1.610	0.013	0.579	0.026
c522	19:44:28.48	−14:53:54.7	18.679	0.007	1.203	0.011	0.383	0.014
c523	19:44:49.17	−14:52:15.8	18.737	0.007	1.146	0.012	0.354	0.014
c524	19:44:32.49	−14:49:23.4	18.684	0.006	1.387	0.012	0.506	0.014
c525	19:44:41.23	−14:51:56.3	18.790	0.014	1.341	0.026	0.494	0.024
c526	19:44:52.32	−14:55:31.8	18.839	0.009	1.226	0.019	0.482	0.020
c527	19:44:55.67	−14:50:16.9	18.710	0.016	1.557	0.022	0.512	0.037
c528	19:44:51.53	−14:48:41.0	18.852	0.008	1.272	0.016	0.562	0.019
c529	19:44:55.68	−14:54:05.0	18.884	0.007	1.273	0.014	0.454	0.015
c530	19:44:50.36	−14:55:47.3	18.879	0.007	1.459	0.015	0.484	0.016
c531	19:44:41.84	−14:49:07.2	18.848	0.007	1.514	0.014	0.464	0.016
c532	19:44:53.82	−14:56:25.4	18.935	0.008	1.231	0.013	0.432	0.016
c533	19:44:39.17	−14:53:39.5	18.758	0.022	1.373	0.027	0.559	0.027
c534	19:44:56.33	−14:50:51.4	18.997	0.021	1.393	0.042	0.449	0.038
c535	19:44:50.71	−14:48:41.5	18.930	0.008	1.396	0.015	0.562	0.018
c536	19:44:46.62	−14:49:19.4	18.983	0.010	1.253	0.020	0.490	0.021
c537	19:44:43.23	−14:49:31.3	18.963	0.009	1.258	0.016	0.397	0.018
c538	19:44:38.15	−14:48:54.3	18.994	0.012	1.216	0.027	0.479	0.025
c539	19:44:54.18	−14:48:28.2	19.012	0.022	1.304	0.036	0.350	0.033
c540	19:44:43.53	−14:50:19.9	18.985	0.014	1.196	0.019	0.439	0.021

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c541	19:44:42.35	–14:51:50.4	19.024	0.021	1.432	0.042	0.413	0.043
c542	19:44:54.24	–14:51:27.9	19.076	0.015	1.405	0.036	0.385	0.034
c543	19:44:40.51	–14:49:36.9	18.982	0.010	1.603	0.022	0.495	0.021
c544	19:44:46.63	–14:49:26.5	18.930	0.013	1.527	0.018	0.468	0.021
c545	19:44:49.29	–14:48:46.8	19.028	0.011	1.524	0.021	0.523	0.022
c546	19:44:50.92	–14:49:48.8	19.091	0.013	1.173	0.024	0.430	0.024
c547	19:44:50.60	–14:48:55.8	18.995	0.015	1.342	0.020	0.433	0.027
c548	19:44:56.47	–14:51:38.8	19.091	0.015	1.128	0.023	0.450	0.025
c549	19:44:53.74	–14:55:20.2	19.040	0.007	1.261	0.012	0.446	0.016
c550	19:44:55.94	–14:49:51.2	19.131	0.012	1.118	0.022	0.397	0.025
c551	19:44:53.17	–14:49:25.6	18.921	0.049	1.471	0.052	0.530	0.021
c552	19:44:49.60	–14:55:35.2	19.029	0.009	1.687	0.019	0.460	0.017
c553	19:44:53.43	–14:52:54.4	19.089	0.008	1.144	0.015	0.405	0.018
c554	19:44:54.26	–14:52:55.9	19.069	0.010	1.262	0.015	0.536	0.020
c555	19:44:50.99	–14:49:29.9	19.093	0.012	1.119	0.020	0.419	0.022
c556	19:44:52.97	–14:51:50.0	19.138	0.012	1.174	0.025	0.426	0.027
c557	19:44:56.37	–14:50:12.3	19.050	0.019	1.332	0.025	0.540	0.023
c558	19:44:28.49	–14:50:43.5	19.091	0.013	1.262	0.024	0.498	0.026
c559	19:44:32.55	–14:49:10.4	19.019	0.011	1.245	0.015	0.410	0.021
c560	19:44:55.78	–14:53:42.3	19.111	0.009	1.352	0.024	0.502	0.021

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c561	19:44:40.97	−14:51:35.2	19.036	0.011	1.363	0.016	0.517	0.018
c562	19:44:48.48	−14:50:52.2	19.048	0.010	1.492	0.018	0.454	0.020
c563	19:44:46.78	−14:51:41.1	19.139	0.019	1.207	0.038	0.397	0.044
c564	19:44:48.34	−14:50:55.6	19.068	0.009	1.278	0.014	0.560	0.024
c565	19:44:32.43	−14:56:30.0	19.171	0.009	1.524	0.039	0.667	0.024
c566	19:44:54.51	−14:52:36.6	19.092	0.010	1.400	0.016	0.529	0.020
c567	19:44:52.66	−14:49:01.5	19.146	0.011	1.142	0.019	0.481	0.020
c568	19:44:53.76	−14:49:31.7	19.194	0.021	1.321	0.041	0.625	0.037
c569	19:44:52.29	−14:49:15.6	19.161	0.018	1.488	0.035	0.352	0.040
c570	19:44:54.43	−14:52:52.8	19.070	0.011	1.351	0.016	0.497	0.018
c571	19:44:47.78	−14:48:46.6	19.188	0.013	1.445	0.031	0.436	0.027
c572	19:44:53.50	−14:52:00.2	19.138	0.009	1.220	0.014	0.429	0.020
c573	19:44:50.49	−14:48:48.0	19.126	0.011	1.278	0.019	0.548	0.024
c574	19:44:41.25	−14:53:22.4	19.048	0.007	1.693	0.016	0.481	0.017
c575	19:44:57.30	−14:49:09.3	19.201	0.012	1.252	0.028	0.454	0.026
c576	19:44:45.47	−14:51:03.1	19.136	0.010	1.200	0.017	0.402	0.019
c577	19:44:50.24	−14:53:20.7	19.083	0.009	1.602	0.016	0.530	0.019
c578	19:44:40.47	−14:52:39.7	19.110	0.010	1.484	0.019	0.439	0.021
c579	19:44:49.19	−14:49:42.2	19.168	0.009	1.125	0.015	0.314	0.018
c580	19:44:49.13	−14:50:57.0	19.126	0.010	1.459	0.018	0.512	0.020

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c581	19:44:56.94	−14:49:23.2	19.138	0.016	1.282	0.026	0.506	0.028
c582	19:44:52.04	−14:54:43.7	19.114	0.014	1.188	0.021	0.779	0.042
c583	19:44:38.30	−14:54:06.5	19.167	0.009	1.262	0.015	0.400	0.018
c584	19:44:54.29	−14:50:47.6	19.177	0.010	1.527	0.030	0.566	0.022
c585	19:44:56.48	−14:54:03.0	19.209	0.010	1.126	0.018	0.404	0.020
c586	19:44:55.28	−14:50:32.9	19.201	0.012	1.369	0.024	0.518	0.026
c587	19:44:52.16	−14:50:26.4	19.248	0.019	1.445	0.035	0.443	0.044
c588	19:44:44.19	−14:49:36.0	19.166	0.009	1.465	0.017	0.493	0.019
c589	19:44:40.81	−14:48:32.9	19.184	0.008	1.243	0.014	0.492	0.020
c590	19:44:56.28	−14:49:09.6	19.264	0.017	1.547	0.042	0.552	0.035
c591	19:44:44.68	−14:48:47.4	19.199	0.013	1.345	0.024	0.398	0.022
c592	19:44:49.80	−14:53:46.6	19.253	0.011	1.179	0.022	0.564	0.025
c593	19:44:45.23	−14:51:39.8	19.244	0.012	1.290	0.029	0.477	0.028
c594	19:44:32.55	−14:49:01.4	19.191	0.009	1.322	0.017	0.447	0.020
c595	19:44:51.62	−14:50:51.1	19.231	0.010	1.282	0.018	0.523	0.020
c596	19:44:50.59	−14:51:27.3	19.266	0.021	1.163	0.037	0.423	0.035
c597	19:44:52.00	−14:48:40.8	19.183	0.012	1.675	0.023	0.411	0.025
c598	19:44:45.54	−14:53:59.8	19.226	0.016	1.238	0.019	0.518	0.019
c599	19:44:47.47	−14:53:23.4	19.268	0.015	1.210	0.030	0.435	0.032
c600	19:44:32.52	−14:51:31.9	19.188	0.009	1.258	0.014	0.448	0.017

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c601	19:44:46.73	-14:49:28.6	19.270	0.018	1.381	0.036	0.364	0.037
c602	19:44:57.25	-14:50:21.1	19.362	0.016	1.346	0.034	0.875	0.030
c603	19:44:55.66	-14:51:07.7	19.280	0.016	1.322	0.032	0.441	0.038
c604	19:44:35.16	-14:53:29.3	19.227	0.008	1.205	0.013	0.403	0.017
c605	19:44:51.16	-14:53:39.7	19.264	0.010	1.284	0.017	0.461	0.019
c606	19:44:51.71	-14:59:45.3	19.242	0.010	1.305	0.017	0.445	0.021
c607	19:44:39.13	-14:50:05.7	19.239	0.013	1.246	0.023	0.473	0.026
c608	19:44:52.11	-14:50:04.4	19.310	0.021	1.349	0.042	0.462	0.042
c609	19:44:56.29	-14:50:49.2	19.227	0.017	1.381	0.026	0.523	0.034
c610	19:44:38.21	-14:51:59.3	19.200	0.008	1.443	0.014	0.422	0.018
c611	19:44:57.24	-14:48:34.7	19.349	0.013	1.543	0.035	0.406	0.023
c612	19:44:44.52	-14:53:22.7	19.240	0.009	1.566	0.019	0.440	0.020
c613	19:44:54.81	-14:51:54.2	19.318	0.011	1.189	0.022	0.506	0.025
c614	19:44:48.92	-14:52:07.8	19.263	0.012	1.590	0.026	0.465	0.026
c615	19:44:32.30	-14:51:42.1	19.220	0.010	1.485	0.016	0.448	0.019
c616	19:44:53.06	-14:48:33.5	19.308	0.016	1.498	0.030	0.578	0.023
c617	19:44:55.24	-14:48:50.8	19.288	0.011	1.400	0.021	0.486	0.022
c618	19:44:45.91	-14:49:07.3	19.272	0.011	1.275	0.015	0.528	0.020
c619	19:44:54.04	-14:52:05.5	19.314	0.009	1.122	0.015	0.403	0.020
c620	19:44:37.49	-14:51:39.3	19.313	0.013	1.407	0.026	0.538	0.034

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c621	19:44:51.78	−14:48:49.8	19.261	0.017	1.633	0.029	0.416	0.026
c622	19:44:38.89	−14:49:23.2	19.302	0.010	1.176	0.015	0.544	0.019
c623	19:44:35.10	−14:51:20.7	19.275	0.009	1.359	0.015	0.439	0.020
c624	19:44:40.96	−14:51:03.0	19.355	0.012	1.181	0.021	0.484	0.021
c625	19:44:45.89	−14:52:00.9	19.217	0.015	1.440	0.022	0.515	0.025
c626	19:44:35.83	−14:52:20.5	19.302	0.009	1.296	0.016	0.482	0.019
c627	19:44:46.69	−14:50:33.9	19.201	0.030	1.379	0.051	0.607	0.039
c628	19:44:33.41	−14:48:46.3	19.231	0.017	1.366	0.025	0.598	0.027
c629	19:44:54.78	−14:48:54.6	19.570	0.036	1.110	0.045	0.465	0.028
c630	19:44:43.93	−14:49:44.4	19.347	0.018	1.118	0.025	0.383	0.024
c631	19:44:55.92	−14:51:00.1	19.332	0.009	1.460	0.020	0.491	0.018
c632	19:44:52.91	−14:51:17.1	19.393	0.013	1.513	0.031	0.624	0.027
c633	19:44:55.54	−14:51:21.1	19.335	0.013	1.275	0.020	0.485	0.024
c634	19:44:48.73	−14:48:40.9	19.261	0.017	1.246	0.023	0.541	0.040
c635	19:44:56.34	−14:51:45.4	19.333	0.034	1.221	0.052	0.404	0.032
c636	19:44:48.73	−14:49:20.2	19.447	0.026	1.138	0.040	0.388	0.033
c637	19:44:45.84	−14:58:56.0	19.389	0.008	1.286	0.015	0.445	0.019
c638	19:44:43.11	−14:51:29.3	19.350	0.011	1.446	0.017	0.531	0.025
c639	19:44:53.68	−14:50:22.5	19.255	0.020	1.541	0.027	0.488	0.030
c640	19:44:57.27	−14:50:24.7	19.390	0.010	1.487	0.018	0.430	0.020

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c641	19:44:54.00	−14:51:09.9	19.448	0.013	1.152	0.025	0.476	0.032
c642	19:44:31.15	−14:49:56.2	19.401	0.014	1.169	0.018	0.427	0.023
c643	19:44:45.27	−14:55:12.2	19.471	0.012	1.430	0.029	0.935	0.025
c644	19:44:38.93	−14:52:08.0	19.445	0.011	1.301	0.020	0.734	0.024
c645	19:44:38.86	−14:58:06.0	19.447	0.009	1.254	0.014	0.531	0.019
c646	19:44:28.97	−14:50:39.8	19.414	0.009	1.287	0.016	0.491	0.023
c647	19:44:54.88	−14:48:56.5	19.613	0.040	1.562	0.058	0.564	0.037
c648	19:44:40.83	−14:50:40.5	19.402	0.010	1.645	0.021	0.457	0.021
c649	19:44:42.90	−14:52:34.3	19.494	0.010	1.176	0.016	0.408	0.018
c650	19:44:48.14	−14:58:37.2	19.393	0.019	1.383	0.022	0.444	0.019
c651	19:44:36.83	−14:53:15.8	19.431	0.010	1.649	0.023	0.459	0.024
c652	19:44:41.76	−14:52:13.0	19.425	0.013	1.663	0.022	0.352	0.024
c653	19:44:51.62	−14:48:34.4	19.417	0.013	1.721	0.025	0.483	0.031
c654	19:44:39.56	−14:49:46.0	19.447	0.010	1.559	0.020	0.456	0.022
c655	19:44:29.01	−14:51:07.7	19.429	0.011	1.348	0.016	0.481	0.023
c656	19:44:47.28	−15:00:35.9	19.529	0.012	1.253	0.018	0.342	0.021
c657	19:44:55.63	−14:51:15.0	19.422	0.027	1.181	0.035	0.493	0.040
c658	19:44:41.74	−14:51:19.8	19.529	0.011	1.173	0.018	0.344	0.024
c659	19:44:46.77	−14:53:14.9	19.475	0.012	1.628	0.022	0.438	0.024
c660	19:44:45.99	−14:49:46.5	19.585	0.019	1.455	0.039	0.758	0.039

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c661	19:44:56.65	-14:49:35.7	19.640	0.017	1.126	0.030	0.408	0.033
c662	19:44:47.78	-14:48:58.2	19.412	0.026	1.337	0.035	0.450	0.040
c663	19:44:51.68	-14:51:39.5	19.560	0.012	1.452	0.025	0.391	0.026
c664	19:44:55.14	-14:54:41.3	19.588	0.010	1.154	0.017	0.422	0.026
c665	19:44:53.76	-14:51:46.1	19.550	0.011	1.474	0.020	0.484	0.021
c666	19:44:39.39	-14:50:39.3	19.641	0.012	1.123	0.023	0.537	0.029
c667	19:44:56.85	-14:52:19.7	19.575	0.012	1.148	0.018	0.434	0.023
c668	19:44:51.92	-14:48:55.2	19.497	0.033	1.357	0.054	0.576	0.046
c669	19:44:53.09	-14:51:27.9	19.605	0.013	1.362	0.026	0.480	0.026
c670	19:44:39.35	-14:49:38.8	19.563	0.013	1.589	0.027	0.382	0.024
c671	19:44:55.64	-14:55:07.5	19.524	0.010	1.644	0.020	0.429	0.021
c672	19:44:40.16	-14:52:12.7	19.600	0.013	1.326	0.023	0.447	0.025
c673	19:44:43.28	-14:49:15.9	19.575	0.015	1.234	0.025	0.405	0.031
c674	19:44:37.33	-14:52:42.7	19.566	0.010	1.506	0.018	0.750	0.024
c675	19:44:47.87	-14:50:09.3	19.613	0.011	1.408	0.025	0.706	0.027
c676	19:44:49.34	-14:53:15.5	19.642	0.012	1.347	0.021	0.664	0.023
c677	19:44:40.32	-14:50:12.9	19.586	0.017	1.643	0.033	0.441	0.030
c678	19:44:51.41	-14:50:16.2	19.660	0.014	1.675	0.038	0.386	0.028
c679	19:44:39.61	-14:59:35.2	19.606	0.010	1.406	0.018	0.401	0.021
c680	19:44:40.32	-14:50:31.9	19.700	0.018	1.122	0.030	0.438	0.036

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c681	19:44:38.30	-14:52:55.5	19.634	0.012	1.392	0.021	0.476	0.024
c682	19:44:52.06	-14:59:26.0	19.643	0.012	1.346	0.019	0.436	0.021
c683	19:44:54.94	-14:49:51.0	19.700	0.015	1.259	0.033	0.521	0.035
c684	19:44:54.97	-14:48:45.5	19.757	0.017	1.264	0.035	0.405	0.037
c685	19:44:50.24	-14:51:06.8	19.628	0.013	1.515	0.026	0.509	0.042
c686	19:44:46.27	-14:48:47.0	19.684	0.016	1.244	0.029	0.533	0.029
c687	19:44:48.86	-14:57:10.7	19.628	0.011	1.467	0.019	0.735	0.025
c688	19:44:46.21	-14:52:03.9	19.686	0.017	1.565	0.035	0.508	0.028
c689	19:44:51.01	-14:52:22.7	19.661	0.028	1.156	0.031	0.590	0.029
c690	19:44:48.42	-14:53:57.9	19.681	0.011	1.499	0.022	0.417	0.024
c691	19:44:47.45	-14:53:00.8	19.673	0.010	1.417	0.019	0.510	0.023
c692	19:44:44.96	-14:51:14.4	19.759	0.016	1.165	0.026	0.344	0.027
c693	19:44:51.15	-14:50:17.6	19.744	0.014	1.229	0.028	0.427	0.030
c694	19:44:38.02	-14:48:28.5	19.693	0.017	1.227	0.025	0.545	0.040
c695	19:44:49.03	-14:53:48.0	19.658	0.014	1.871	0.027	0.339	0.023
c696	19:44:52.50	-14:48:47.0	19.709	0.017	1.754	0.034	0.516	0.032
c697	19:44:53.21	-14:50:22.2	19.822	0.023	1.138	0.029	0.544	0.032
c698	19:44:54.35	-14:48:31.3	19.767	0.019	1.710	0.045	0.457	0.038
c699	19:44:42.92	-14:52:06.8	19.709	0.013	1.602	0.023	0.488	0.027
c700	19:44:42.60	-14:51:13.4	19.791	0.014	1.223	0.023	0.456	0.026

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c701	19:44:48.57	−14:49:04.1	19.762	0.017	1.679	0.031	0.472	0.030
c702	19:44:36.89	−14:53:11.5	19.845	0.014	1.161	0.027	0.393	0.028
c703	19:44:36.92	−14:53:17.2	19.805	0.012	1.800	0.031	0.309	0.026
c704	19:44:35.36	−14:50:15.0	19.806	0.013	1.547	0.025	0.721	0.037
c705	19:44:44.15	−14:57:43.7	19.822	0.012	1.210	0.018	0.478	0.027
c706	19:44:46.90	−14:48:56.5	19.847	0.018	1.334	0.030	0.476	0.033
c707	19:44:39.38	−14:50:29.2	19.845	0.014	1.517	0.028	0.359	0.030
c708	19:44:54.47	−14:50:13.0	19.873	0.021	1.411	0.040	0.485	0.039
c709	19:44:50.23	−14:51:05.5	19.928	0.020	1.245	0.029	0.810	0.036
c710	19:44:49.22	−14:52:31.9	19.942	0.013	1.216	0.030	0.527	0.028
c711	19:44:41.40	−14:49:15.8	19.925	0.016	1.322	0.029	0.494	0.029
c712	19:44:35.18	−14:51:34.6	19.875	0.013	1.442	0.022	0.469	0.025
c713	19:44:48.90	−14:51:03.2	20.021	0.021	1.354	0.042	0.543	0.041
c714	19:44:40.65	−14:49:06.4	19.948	0.018	1.179	0.027	0.396	0.033
c715	19:44:52.63	−14:56:08.8	20.029	0.022	1.424	0.041	0.438	0.033
c716	19:44:42.46	−14:52:40.5	20.074	0.015	1.101	0.025	0.640	0.033
c717	19:44:56.75	−14:51:25.1	20.066	0.033	1.462	0.062	0.334	0.056
c718	19:44:52.85	−14:49:57.2	20.222	0.024	1.113	0.043	0.520	0.068
c719	19:44:37.90	−14:55:43.8	20.199	0.027	1.230	0.049	0.305	0.034
c720	19:44:32.92	−14:51:51.4	20.150	0.016	1.372	0.029	0.337	0.038

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c721	19:44:53.83	−14:48:59.0	20.304	0.025	1.450	0.046	0.486	0.047
c722	19:44:55.48	−14:49:32.9	20.338	0.026	1.274	0.036	0.517	0.048
c723	19:45:21.36	−14:52:50.3	17.991	0.004	1.181	0.008	0.557	0.010
c724	19:45:02.49	−14:49:04.6	18.115	0.007	1.316	0.013	0.661	0.013
c725	19:45:10.70	−14:48:33.3	18.425	0.012	1.228	0.030	0.454	0.028
c726	19:44:58.33	−14:48:52.3	18.445	0.024	1.336	0.050	0.361	0.042
c727	19:45:02.96	−14:52:55.9	18.371	0.007	1.286	0.011	1.033	0.013
c728	19:45:20.93	−14:51:01.7	18.460	0.005	1.130	0.008	0.453	0.012
c729	19:44:58.67	−14:48:37.4	18.655	0.015	1.291	0.030	0.502	0.034
c730	19:45:00.32	−14:49:42.4	18.666	0.012	1.320	0.023	0.518	0.023
c731	19:45:11.83	−14:50:10.9	18.610	0.011	1.627	0.021	0.474	0.018
c732	19:45:20.89	−14:48:55.0	18.686	0.010	1.152	0.016	0.364	0.018
c733	19:45:00.16	−14:50:19.1	18.690	0.010	1.160	0.016	0.450	0.020
c734	19:44:58.30	−14:49:09.4	18.706	0.010	1.252	0.021	0.555	0.018
c735	19:45:06.91	−14:51:31.4	18.584	0.010	1.482	0.013	0.505	0.021
c736	19:45:03.69	−14:50:11.4	18.723	0.008	1.254	0.013	0.488	0.015
c737	19:45:23.00	−14:57:36.2	18.758	0.006	1.181	0.010	0.423	0.012
c738	19:45:14.06	−14:50:25.6	18.811	0.008	1.104	0.014	0.422	0.017
c739	19:45:03.52	−14:53:25.0	18.768	0.009	1.335	0.016	0.622	0.014
c740	19:45:23.90	−14:53:38.9	18.835	0.005	1.177	0.011	0.455	0.013

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c741	19:44:58.83	−14:49:10.1	18.953	0.013	1.257	0.031	0.520	0.036
c742	19:45:07.52	−14:59:18.6	18.913	0.006	1.147	0.012	0.426	0.015
c743	19:45:24.95	−14:54:44.2	18.897	0.007	1.194	0.012	0.405	0.014
c744	19:44:59.15	−14:50:45.1	18.912	0.009	1.286	0.017	0.370	0.017
c745	19:45:21.11	−14:59:19.1	18.860	0.006	1.443	0.011	0.402	0.014
c746	19:45:03.82	−14:49:27.4	18.974	0.009	1.438	0.024	0.503	0.021
c747	19:44:58.38	−14:48:51.5	19.032	0.019	1.385	0.048	0.521	0.044
c748	19:45:00.03	−14:53:35.4	18.991	0.008	1.197	0.014	0.461	0.016
c749	19:45:07.35	−14:59:22.2	18.946	0.007	1.334	0.012	0.446	0.015
c750	19:45:23.24	−14:51:19.1	18.982	0.008	1.233	0.014	0.517	0.017
c751	19:45:08.56	−14:52:40.4	18.951	0.009	1.537	0.018	0.458	0.016
c752	19:44:58.73	−14:49:56.0	19.016	0.016	1.381	0.031	0.852	0.032
c753	19:45:21.05	−14:50:01.3	18.936	0.006	1.433	0.011	0.464	0.014
c754	19:45:10.61	−14:53:04.2	18.952	0.008	1.547	0.016	0.495	0.019
c755	19:45:00.52	−14:48:47.1	19.041	0.010	1.165	0.019	0.435	0.022
c756	19:45:20.62	−14:54:10.3	19.015	0.007	1.142	0.011	0.411	0.016
c757	19:45:22.99	−14:50:04.4	19.003	0.008	1.204	0.012	0.524	0.017
c758	19:45:16.33	−14:50:27.5	18.962	0.007	1.316	0.011	0.526	0.016
c759	19:45:11.35	−14:52:11.0	19.028	0.007	1.129	0.011	0.375	0.015
c760	19:45:02.49	−14:49:55.2	19.079	0.011	1.311	0.023	0.569	0.025

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R–I	$\sigma_{R-I}$	CN–TiO	$\sigma_{CN-TiO}$
c761	19:44:58.20	−14:50:31.5	19.026	0.024	1.276	0.029	0.359	0.045
c762	19:45:10.71	−14:53:19.8	19.035	0.010	1.153	0.014	0.398	0.019
c763	19:45:13.20	−14:52:07.1	19.034	0.008	1.388	0.015	0.493	0.018
c764	19:45:21.41	−14:49:21.7	19.086	0.009	1.194	0.016	0.472	0.018
c765	19:45:19.39	−14:49:16.5	19.029	0.008	1.313	0.013	0.498	0.016
c766	19:45:03.68	−14:55:28.9	19.101	0.008	1.106	0.014	0.370	0.018
c767	19:45:00.25	−14:49:39.5	19.049	0.010	1.549	0.021	0.540	0.020
c768	19:45:05.02	−14:49:00.2	19.084	0.011	1.377	0.020	0.493	0.021
c769	19:44:58.98	−14:51:02.7	18.968	0.021	1.172	0.037	0.560	0.033
c770	19:45:04.73	−14:48:42.7	19.151	0.010	1.179	0.018	0.393	0.036
c771	19:45:03.54	−14:51:08.5	19.097	0.009	1.411	0.018	0.525	0.017
c772	19:45:03.28	−14:50:00.2	19.158	0.011	1.267	0.024	0.514	0.024
c773	19:45:06.13	−14:51:13.3	19.066	0.009	1.423	0.014	0.518	0.019
c774	19:45:08.83	−14:50:49.0	19.176	0.013	1.284	0.032	0.392	0.025
c775	19:45:01.92	−14:50:33.0	19.093	0.009	1.472	0.017	0.444	0.016
c776	19:45:18.12	−14:59:51.4	19.120	0.008	1.215	0.012	0.424	0.017
c777	19:44:59.14	−14:51:52.4	19.070	0.009	1.315	0.015	0.499	0.024
c778	19:45:09.77	−14:49:49.6	19.121	0.008	1.282	0.015	0.486	0.017
c779	19:45:01.90	−14:54:12.5	19.119	0.008	1.665	0.020	0.383	0.019
c780	19:44:58.80	−14:55:55.0	19.125	0.008	1.297	0.013	0.573	0.017

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c781	19:45:10.76	-14:51:52.3	19.134	0.009	1.319	0.016	0.513	0.022
c782	19:45:08.88	-14:57:44.5	19.078	0.007	1.500	0.012	0.469	0.016
c783	19:45:07.68	-14:49:07.1	19.203	0.011	1.306	0.029	0.488	0.027
c784	19:45:15.30	-14:52:00.0	19.146	0.009	1.301	0.014	0.530	0.018
c785	19:45:03.03	-14:50:51.7	18.976	0.015	1.573	0.021	0.547	0.025
c786	19:45:06.86	-14:49:19.3	19.143	0.010	1.334	0.022	0.556	0.027
c787	19:45:06.38	-14:48:26.7	19.199	0.009	1.278	0.017	0.479	0.020
c788	19:45:04.08	-14:54:36.4	19.172	0.009	1.463	0.017	0.411	0.019
c789	19:45:10.72	-14:48:31.3	19.214	0.017	1.445	0.035	0.430	0.029
c790	19:44:58.75	-14:50:41.4	19.196	0.012	1.151	0.020	0.427	0.022
c791	19:45:01.17	-14:50:26.5	19.167	0.022	1.188	0.029	0.515	0.032
c792	19:45:02.62	-14:49:56.1	19.181	0.018	1.622	0.039	0.399	0.037
c793	19:45:02.27	-14:50:03.7	19.179	0.009	1.259	0.017	0.504	0.019
c794	19:45:16.31	-14:53:42.1	19.214	0.007	1.159	0.012	0.401	0.017
c795	19:45:19.38	-14:48:40.5	19.163	0.014	1.354	0.019	0.500	0.024
c796	19:45:23.22	-14:55:09.9	19.195	0.008	1.567	0.016	0.395	0.019
c797	19:45:15.78	-14:50:56.7	19.294	0.008	1.123	0.018	0.444	0.020
c798	19:45:03.04	-14:50:14.5	19.147	0.020	1.226	0.026	0.417	0.030
c799	19:45:09.11	-14:48:50.2	19.281	0.020	1.274	0.037	0.581	0.026
c800	19:45:07.61	-14:49:17.0	19.273	0.011	1.255	0.019	0.490	0.023

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c801	19:45:15.89	-14:49:29.6	19.236	0.009	1.634	0.020	0.455	0.017
c802	19:45:00.18	-14:49:28.0	19.333	0.015	1.145	0.031	0.576	0.028
c803	19:44:59.50	-14:53:49.4	19.219	0.009	1.381	0.015	0.423	0.019
c804	19:45:14.85	-14:55:16.3	19.256	0.008	1.463	0.014	0.436	0.017
c805	19:45:11.10	-14:49:42.8	19.357	0.013	1.324	0.028	0.489	0.025
c806	19:45:02.46	-14:58:02.7	19.265	0.008	1.462	0.014	0.467	0.017
c807	19:45:12.46	-14:49:20.0	19.276	0.015	1.146	0.019	0.430	0.024
c808	19:45:06.49	-14:56:51.4	19.346	0.009	1.181	0.014	0.372	0.019
c809	19:45:21.23	-14:48:32.2	19.350	0.010	1.215	0.018	0.359	0.020
c810	19:45:01.35	-15:01:25.0	19.333	0.009	1.206	0.015	0.306	0.025
c811	19:44:57.75	-14:53:15.6	19.330	0.011	1.359	0.018	0.536	0.020
c812	19:45:02.98	-14:50:54.5	19.267	0.011	1.745	0.021	0.422	0.025
c813	19:45:04.26	-14:54:29.6	19.337	0.011	1.559	0.022	0.477	0.021
c814	19:45:02.32	-14:50:51.6	19.354	0.009	1.357	0.018	0.493	0.027
c815	19:45:04.62	-14:50:36.1	19.358	0.011	1.150	0.019	0.396	0.023
c816	19:45:02.04	-14:48:37.4	19.415	0.015	1.153	0.031	0.493	0.023
c817	19:45:09.10	-14:51:59.8	19.368	0.009	1.183	0.015	0.604	0.024
c818	19:45:03.63	-14:57:40.4	19.356	0.009	1.187	0.013	0.344	0.017
c819	19:45:24.17	-14:56:03.8	19.251	0.011	1.664	0.017	0.417	0.018
c820	19:45:00.78	-14:50:35.7	19.302	0.015	1.290	0.019	0.530	0.020

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c821	19:45:02.32	-14:48:54.9	19.362	0.011	1.417	0.021	0.464	0.021
c822	19:45:06.58	-14:50:17.2	19.396	0.013	1.662	0.031	0.468	0.027
c823	19:45:14.65	-14:58:22.6	19.373	0.010	1.438	0.020	0.657	0.024
c824	19:45:19.81	-14:57:03.4	19.362	0.010	1.237	0.017	0.408	0.021
c825	19:45:10.83	-14:49:32.1	19.430	0.012	1.235	0.022	0.467	0.023
c826	19:45:08.22	-14:48:42.6	19.405	0.013	1.377	0.022	0.490	0.025
c827	19:45:07.81	-14:52:07.4	19.366	0.013	1.168	0.020	0.430	0.024
c828	19:45:19.91	-14:51:33.5	19.312	0.008	1.603	0.015	0.461	0.019
c829	19:45:22.61	-14:49:15.8	19.407	0.013	1.127	0.018	0.499	0.018
c830	19:45:01.78	-14:50:13.8	19.445	0.016	1.161	0.022	0.427	0.030
c831	19:44:58.61	-14:48:46.8	19.385	0.013	1.814	0.030	0.392	0.028
c832	19:44:59.15	-14:53:43.2	19.401	0.011	1.517	0.018	0.525	0.019
c833	19:45:01.53	-14:48:26.4	19.444	0.017	1.641	0.026	0.453	0.028
c834	19:45:00.01	-14:53:22.4	19.444	0.011	1.358	0.018	0.516	0.022
c835	19:45:09.55	-14:52:33.8	19.474	0.012	1.360	0.027	0.556	0.024
c836	19:45:04.02	-14:50:44.0	19.419	0.015	1.222	0.018	0.440	0.020
c837	19:45:07.58	-14:48:59.7	19.485	0.012	1.189	0.021	0.386	0.026
c838	19:45:18.10	-14:49:05.5	19.393	0.010	1.683	0.017	0.452	0.020
c839	19:44:58.90	-14:51:07.5	19.509	0.013	1.565	0.026	0.474	0.025
c840	19:45:15.25	-14:50:57.9	19.516	0.011	1.317	0.018	0.484	0.022

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c841	19:45:13.51	-14:51:46.4	19.473	0.011	1.744	0.021	0.403	0.026
c842	19:45:02.73	-14:53:00.4	19.602	0.013	1.137	0.023	0.424	0.026
c843	19:45:01.05	-14:49:02.8	19.618	0.020	1.133	0.034	0.342	0.033
c844	19:44:58.99	-14:53:21.6	19.584	0.012	1.246	0.022	0.379	0.025
c845	19:45:15.12	-14:49:36.7	19.612	0.011	1.255	0.018	0.459	0.022
c846	19:45:05.38	-14:49:55.3	19.574	0.015	1.377	0.022	0.554	0.025
c847	19:45:08.05	-14:48:26.6	19.642	0.014	1.168	0.024	0.311	0.026
c848	19:45:11.08	-14:50:33.0	19.664	0.012	1.187	0.021	0.478	0.023
c849	19:45:11.21	-14:50:55.8	19.742	0.017	1.185	0.028	0.409	0.032
c850	19:45:07.04	-14:50:01.5	19.726	0.014	1.478	0.024	0.494	0.024
c851	19:45:18.83	-14:50:35.7	19.751	0.013	1.132	0.018	0.593	0.027
c852	19:45:02.71	-14:51:39.7	19.726	0.017	1.293	0.025	0.734	0.034
c853	19:45:16.74	-14:54:29.5	19.757	0.015	1.414	0.029	0.348	0.027
c854	19:45:00.25	-14:54:21.9	19.831	0.014	1.204	0.022	0.484	0.025
c855	19:45:01.28	-14:54:32.7	19.823	0.016	1.235	0.027	0.581	0.032
c856	19:45:05.07	-14:51:08.6	19.648	0.032	1.737	0.044	0.377	0.051
c857	19:44:59.11	-14:51:58.4	19.804	0.012	1.858	0.024	0.449	0.025
c858	19:45:25.41	-14:49:09.8	19.825	0.018	1.511	0.027	0.397	0.027
c859	19:44:57.95	-14:50:45.3	19.949	0.022	1.215	0.041	0.365	0.040
c860	19:45:00.63	-14:52:28.2	19.825	0.029	1.381	0.037	0.514	0.031

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c861	19:45:05.67	-14:53:12.1	20.006	0.015	1.177	0.023	0.447	0.026
c862	19:45:06.61	-14:52:28.0	20.026	0.021	1.606	0.043	0.459	0.037
c863	19:45:18.36	-14:58:11.4	20.046	0.014	1.179	0.022	0.451	0.027
c864	19:45:06.28	-14:48:59.7	20.103	0.023	1.640	0.038	0.708	0.033
c865	19:45:04.01	-14:54:39.2	20.235	0.016	1.545	0.038	0.717	0.037
c866	19:45:00.62	-14:51:37.1	20.320	0.021	1.269	0.035	0.337	0.049
c867	19:45:05.32	-14:49:53.0	20.691	0.034	1.430	0.058	0.625	0.061
c868	19:45:33.93	-14:59:26.3	18.659	0.007	1.524	0.011	0.463	0.013
c869	19:45:36.57	-14:52:25.9	18.756	0.006	1.288	0.010	0.569	0.014
c870	19:45:55.63	-14:56:19.4	18.814	0.006	1.165	0.010	0.493	0.014
c871	19:45:54.07	-14:54:59.9	18.915	0.009	1.157	0.019	0.454	0.022
c872	19:45:55.04	-14:58:26.8	18.826	0.007	1.438	0.011	0.368	0.015
c873	19:45:38.48	-14:50:58.6	18.819	0.006	1.478	0.012	0.577	0.014
c874	19:45:44.26	-14:50:04.3	18.916	0.007	1.109	0.010	0.421	0.016
c875	19:45:54.05	-14:53:52.8	18.857	0.007	1.452	0.012	0.483	0.014
c876	19:45:43.69	-15:01:04.4	18.826	0.007	1.546	0.013	0.315	0.015
c877	19:45:27.58	-14:51:54.3	19.001	0.010	1.155	0.018	0.478	0.017
c878	19:45:45.58	-14:53:03.1	18.973	0.007	1.264	0.012	0.547	0.015
c879	19:45:37.26	-14:48:44.7	19.019	0.007	1.160	0.015	0.406	0.018
c880	19:45:50.86	-14:57:42.4	18.896	0.006	1.615	0.011	0.358	0.014

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c881	19:45:28.39	-14:54:46.6	18.953	0.007	1.701	0.015	0.356	0.018
c882	19:45:29.19	-14:54:14.0	18.987	0.007	1.725	0.016	0.472	0.017
c883	19:45:27.88	-14:51:08.4	19.053	0.008	1.384	0.016	0.512	0.017
c884	19:45:35.87	-14:58:49.4	19.093	0.011	1.146	0.018	0.372	0.016
c885	19:45:28.76	-14:52:21.6	19.053	0.008	1.619	0.015	0.537	0.017
c886	19:45:50.74	-14:51:16.2	19.092	0.007	1.556	0.014	0.491	0.017
c887	19:45:33.76	-14:52:20.4	19.212	0.008	1.133	0.013	0.427	0.019
c888	19:45:30.97	-14:48:31.3	19.208	0.010	1.123	0.015	0.431	0.017
c889	19:45:44.69	-14:53:41.5	19.177	0.009	1.487	0.015	0.514	0.021
c890	19:45:47.07	-14:48:39.3	19.254	0.008	1.170	0.013	0.441	0.018
c891	19:45:48.11	-14:57:11.7	19.305	0.009	1.134	0.015	0.388	0.020
c892	19:45:42.94	-14:59:12.4	19.304	0.009	1.369	0.015	0.472	0.017
c893	19:45:32.22	-14:50:24.0	19.365	0.009	1.417	0.017	0.590	0.019
c894	19:45:33.41	-14:50:47.1	19.434	0.010	1.231	0.015	0.467	0.019
c895	19:45:43.49	-14:53:21.0	19.495	0.014	1.243	0.025	0.486	0.027
c896	19:45:27.68	-14:55:50.4	19.546	0.011	1.338	0.018	0.607	0.023
c897	19:45:29.14	-14:50:12.0	19.901	0.013	1.149	0.020	0.450	0.023
c898	19:45:31.48	-14:50:42.7	20.627	0.025	1.713	0.051	0.391	0.041
c899	19:46:05.45	-14:50:34.6	18.544	0.005	1.104	0.007	0.342	0.011
c900	19:46:07.85	-14:53:57.7	19.162	0.008	1.302	0.012	0.438	0.016

Table 2—Continued

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c901	19:46:10.93	−14:54:01.8	19.078	0.007	1.662	0.012	0.428	0.019
c902	19:46:10.60	−14:58:48.1	19.286	0.009	1.388	0.014	0.654	0.017
c903	19:46:22.03	−14:55:14.2	19.838	0.011	1.428	0.020	0.334	0.024
c904	19:46:18.98	−15:02:28.8	20.321	0.025	1.541	0.049	0.323	0.045

Table 2. C stars in NGC 6822

id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
c001	19:43:52.57	-14:40:58.8	18.724	0.006	1.214	0.009	0.469	0.013
c002	19:43:52.69	-14:41:40.0	18.998	0.007	1.147	0.010	0.424	0.013
c003	19:43:56.96	-14:43:01.8	19.280	0.008	1.419	0.013	0.457	0.016
c004	19:43:54.52	-14:43:35.5	19.667	0.010	1.255	0.015	0.423	0.023
c005	19:43:58.53	-14:37:44.2	20.745	0.022	1.624	0.046	0.403	0.043
c006	19:44:28.08	-14:37:58.2	18.163	0.005	1.177	0.008	0.371	0.009
c007	19:44:19.70	-14:40:59.5	18.420	0.005	1.175	0.007	0.504	0.010
c008	19:44:02.54	-14:44:40.1	18.458	0.005	1.257	0.008	0.531	0.011
c009	19:44:21.12	-14:44:24.2	18.542	0.006	1.266	0.009	0.370	0.011
c010	19:44:10.33	-14:46:55.1	18.724	0.006	1.425	0.011	0.520	0.012
c011	19:44:01.93	-14:41:09.6	19.047	0.008	1.300	0.013	0.453	0.014
c012	19:44:26.58	-14:43:32.7	19.023	0.007	1.480	0.012	0.456	0.014
c013	19:44:26.36	-14:43:29.3	19.110	0.008	1.141	0.012	0.334	0.015
c014	19:44:18.81	-14:47:21.9	19.027	0.007	1.513	0.012	0.497	0.014
c015	19:44:19.68	-14:45:04.2	19.095	0.010	1.314	0.016	0.448	0.017
c016	19:44:26.55	-14:45:41.3	19.079	0.010	1.629	0.018	0.498	0.020
c017	19:44:17.54	-14:48:04.8	19.145	0.010	1.109	0.014	0.450	0.017
c018	19:44:20.37	-14:46:51.1	19.150	0.008	1.280	0.014	0.502	0.017
c019	19:44:24.86	-14:43:22.6	19.151	0.009	1.273	0.014	0.481	0.020

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Table 3. C stars outside of the CFH12K field

	id	RA	Dec	I	$\sigma_I$	R-I	$\sigma_{R-I}$	CN-TiO	$\sigma_{CN-TiO}$
	C1001	19:43: 25.59	-14:56:49.5	19.289	0.032	1.434	0.065	0.266	0.058
	C1002	19:43: 25.80	-14:59:06.8	19.156	0.035	1.205	0.100	0.248	0.096
	C1003	19:43: 29.44	-14:46:47.3	19.522	0.045	1.351	0.092	0.467	0.088

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## The extent of NGC 6822 revealed by its C star population

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## ABSTRACT

Using the CFH12K camera, we apply the four band photometric technique to identify 904 carbon stars in an area  $28' \times 42'$  centered on NGC 6822. A few C stars, outside of this area, were also discovered with the Las Campanas Swope Telescope. The NGC 6822 C star population has  $\langle I \rangle = 19.26$  leading to a  $\langle M_I \rangle = -4.70$ , a value essentially identical to the mean magnitude obtained for the C stars in IC 1613. Contrary to stars highlighting the optical image of NGC 6822, C stars are seen at large radial distances and trace a huge slightly elliptical halo which does not coincide with the huge HI cloud surrounding NGC 6822. The previously unknown stellar component of NGC 6822 has a exponential scale length of  $3.0' \pm 0.1'$  and can be traced to five scale lengths. The C/M ratio of NGC 6822 is evaluated to be  $1.0 \pm 0.2$ .

*Subject headings:* galaxies: individual (NGC 6822) — galaxies: stellar content; structure — stars: carbon

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<sup>1</sup>Visiting Observers, Canada-France-Hawaii Telescope, operated by the National Research Council of Canada, le Centre National de la Recherche de France and the University of Hawaii.

## 1. INTRODUCTION

NGC 6822 is a barred dwarf galaxy of type IrIV-V (van den Bergh 1968), a classification similar to the Small Magellanic Cloud. Hubble (1925) discovered Cepheids in NGC 6822 and could conclude that it is a relatively nearby galaxy. NGC 6822 has recently been the subject of detailed multi-color investigation by Gallart, Aparicio & Vílchez (1996). We adopt, for NGC 6822, their determined color excess  $E(B-V) = 0.24 \pm 0.03$  and true modulus  $(m - M)_o = 23.49 \pm 0.08$ . The abundance of two supergiants of NGC 6822 has recently been determined, from high resolution spectroscopy, by Venn et al. (2001). We adopt their estimate,  $[Fe/H] = -0.49$ , for the metallicity of NGC 6822.

NGC 6822 is nearly unique among the Local Group galaxies by having a huge hydrogen envelope, several times bigger than its optical core (Robert 1972, Gottesman & Weliachew 1977, de Blok & Walter 2000). IC 1613 (Lake & Skillman 1989), IC 10 the highly reddened galaxy (Huchtmeier 1979) and to a lesser extent, NGC 3109 (Barnes & de Blok 2001) have also a similar HI envelope. The global structure of NGC 6822 was first surveyed by Hodge (1977) and in more detailed by Hodge et al. (1991) who could trace the galaxy to  $10'$  from its center. Hodge adopted the point of view that the outer structure of NGC 6822 is circular rather than following the shape of the bar. Because NGC 6822 is at a rather low Galactic latitude,  $b = -18.4^\circ$ , the low density periphery of the galaxy is masked by the foreground stars. The exact size of NGC 6822 is rather difficult to establish simply from star counts. The NASA/IPAC Extragalactic Database (NED) quotes a dimension of  $15.5' \times 13.5'$  which is much smaller than the HI envelope mentioned above but is quite in line with Hodge's study.

All photometric surveys of NGC 6822, with the exception of the one by Hutchings, Cavanagh & Bianchi (1999) have targeted the obvious central part of the galaxy. Hutchings et al. (1999) have obtained HST photometry in two small regions located  $\sim 2$  kpc from the optical center of NGC 6822. They detected the presence of main sequence stars extending to  $2 M_\odot$  in the western field and suggested that this population might be the result of a tidal event. The presence of an hydrogen tidal arm was proposed by the HI map of de Blok & Walter (2000).

Cook, Aaronson & Norris (1986), who pioneered the photometric technique we are now using, were the first to target NGC 6822 in search of C stars. They observed two small ( $1.5' \times 2.5'$ ) fields located along the central bar on opposite sides, a few arcminutes from its geometrical center. Some fifty C stars were identified. Follow-up spectroscopy confirmed the nature of the C stars (Aaronson et al. 1984) and lead to the discovery of the first S star in NGC 6822 (Aaronson, Mould & Cook 1985). That investigation observed barely 3% of the area of NGC 6822, if we assume the dimensions given by NED.

Battinelli & Demers (2000) have obtained a preliminary relation linking the number of C stars in a galaxy with its integrated absolute visual magnitude. This relation predicts that galaxies with  $M_V < -15$  would have more than a few hundred C stars. NGC 6822 with  $M_V = -15.2$  (Mateo 1998) should have at least 500 C stars. Such large number would provide sufficient statistics to

investigate the extent of NGC 6822. A survey of the periphery is particularly interesting for a galaxy such as NGC 6822. Indeed, tidal interaction has been proposed (de Blok & Walter 2000) to explain the asymmetric shape of the extended hydrogen disc. It is reasonable to expect that the spatial distribution (and kinematics) of stars as old as  $\sim 3$  Gyr could also have been influenced by the presumed tidal interaction. On the other hand, the huge HI envelope, currently visible, implies that, if a gravitational interaction took place, it must not have been strong enough to drastically disturb the gas. In this respect, C stars have a distinctive advantage, over deep multi color surveys, because the foreground contribution is zero!

On a more global scale, in order to compare the C star population of different galaxies, one must be careful to compare homogeneous samples. That is, not to collect from the literature lists of C stars identified spectroscopically or from different photometric criteria. For example, the  $B_J - R$  criterion used by Totten & Irwin (1998), Whitelock, Irwin & Catchpole (1996) or Kunkel, Irwin & Demers (1997), to select C star candidates for spectroscopy, is not at all equivalent to the (CN – TiO) criterion adopted by Brewer, Richer & Crabtree (1995) and our series of investigations. This is why this paper follows strictly the photometric criteria previously used. In this way, the same C star population will be revealed in a number of dwarf galaxies of different properties.

## 2. OBSERVATIONS AND DATA REDUCTION

### 2.1. The Las Campanas data

The NGC 6822 survey employs two set of observations obtained by rather different telescopes and with different procedures. The Swope telescope, on Las Campanas, was used in October 1999 to secure images of NGC 6822 in Kron-Cousins  $R_{KC}$ , CN (810 nm) and TiO (770 nm) filters. The goal of this brief survey was to identify C stars, from the color-color diagram, for follow-up spectroscopy. Thus, it was deemed unnecessary to acquire I images. A pseudo i magnitude was calculated by adding the CN and TiO magnitudes. The narrow interference filters, used here, have a FWHM of 30 nm and are the ones used in our previous surveys (Albert et al. 2000; Battinelli & Demers 2000; Demers & Battinelli 2002). The  $2048 \times 2048$  SITE#1 CCD yields a field of view of  $23.7' \times 23.7'$ . Two slightly overlapping fields were observed for a total of five hours. Dome flats were obtained through each filters. Calibration to the standard R system was done with Landolt's (1992) equatorial standards observed during the course of the nights. This was done simply to set the magnitude zero point, not as an absolute color calibration. No calibration is done for the CN and TiO filters because we are interested only in the CN – TiO color index and their exposure times are always equal.

After the standard prereduction of trimming, bias subtraction, and sky flat-fielding, the photometric reductions were done by fitting model point-spread functions (PSFs) using DAOPHOT/ALLSTAR/ALLFRAME series of programs (Stetson 1987, 1994) in the following way: we combine, using MONTAGE2, all the images of the target irrespective of the filter to produce a deep image devoid of cosmic rays.

ALLSTAR was then used on this deep image to derive a list of stellar images and produce a second image where the stars, found in the first pass, are removed. This subtracted image is also processed through ALLSTAR to find faint stars missed in the first pass. The second list of stars is added to the first one. The final list is then used for the analysis of the individual frames using ALLFRAME. This program fits model PSFs to stellar objects in all the frames simultaneously. The journal of these observations is presented in Table 1.

## 2.2. The CFHT data

NGC 6822 was also observed with the CFH12K at the beginning of one night in September 2000. The camera consists in a  $12\text{K} \times 8\text{K}$  pixel mosaic covering a field of  $42' \times 28'$ . Each pixel corresponding to 0.206 arcsec. Images were obtained through Mould I,R filters and CN,TiO filters. The CFHT narrow band filters have, however, about half the bandwidth of the Las Campanas ones, thus requiring relatively longer exposure times. The journal of these observations is also given in Table 1.

Preanalysis of our data was done with the FITS Large Images Processing Software (FLIPS) package at the CFHT Headquarters. It is a program specially designed to handle mosaic data. FLIPS corrects for the bias, dark and flat, by averaging the good exposures and rejecting the overexposed and otherwise incorrect frames, for each of the 12 CCD fields of the mosaic. It also takes into account the mask of bad pixels. A nice feature of FLIPS, compared to standard pre-reduction packages, is that it normalizes the background sky values to the most sensitive CCD of the mosaic. This results in 12 fields that are comparable and on the same magnitude scale.

There were a fringe patterns in a few CCD I frames, but no correction for the fringing was done. FLIPS allows us to correct for the fringing effect but “no correction at all” was deemed the best option. Trying to correct for that cosmetic problem often increases the noise on the frame. On a small scale, fringing was fairly constant and in the end, our analysis packages had no difficulty accounting for that anomaly.

Data reduction was done with DAOPHOT/ALLSTAR, in a way similar to the reduction of the Las Campanas data.

### 2.2.1. The CFH12K calibration

The CFHT observations were unfortunately obtained under non photometric conditions, even though the seeing was less than one arc second. We therefore had to use local stars with published magnitudes and colors to calibrate our photometry. This, however, presented a challenge because very few publications present R-I colors. We were fortunate to obtain the NGC 6822 photometry of Gallart et al. (1996) which satisfies our needs entirely.

Using 166 stars, with colors in the range  $0.0 < (R - I) < 2.0$ , we obtained the following transformation equations:

$$R = r + 7,643 \pm 0.022 + 0.0040 \pm 0.0196(R - I)$$

$$I = i + 7.200 \pm 0.009 + 0.0126 \pm 0.0128(R - I)$$

The  $r$  and  $i$  magnitudes are the instrumental magnitudes calibrated to Gallart et al. (1996) photometry. We thus conclude that there is no color term and that the Mould filters provide an excellent match to the Kron-Cousins magnitudes.

The non-photometric conditions oblige us to set a zero point to the CN-TiO colors, even though exposures in each filter were of the same length. We do so by following Brewer et al. (1996) and setting the mean of the  $(\text{CN-TiO}) = 0.00$  for all stars with  $(R-I)_o < 0.45$  since hot stars are expected to have featureless spectra in the CN or TiO regions. Brewer et al. (1996) used V-I colors, the R-I limit adopted here takes into account the relationship between the two indices. Photometry of each of the twelve CCDs was thus calibrated using several hundred stars in each CCD. Stars in the color range  $0.2 < (R - I) < 0.65$  were selected for this zero point adjustment, taking into account the  $E(R - I) = 0.20$ .

### 3. RESULTS

#### 3.1. The color-magnitude diagram

The global color magnitude diagram, (CFH12K data) containing some 65000 stars, is shown in Figure 1. Only stars with small photometric errors are plotted here. This explains why the fainter limits abruptly appears at  $I \approx 21.5$ , *two magnitudes below the red giant tip*. We restrict our analysis to stars for which the square root of the quadratic sum of the errors on R-I and CN-TiO is less than 0.100. This limit is somewhat arbitrary but is justified because the inclusion of numerous fainter stars pollutes enormously the color-color diagram without increasing the number of carbon stars. The vertical ridge, at  $(R - I) \approx 0.55$  is an interesting feature usually present in deep CMD fields toward low Galactic latitudes. The blue side of this ridge corresponds to the main sequence turnoff of field G dwarfs. If we adopt  $(R - I)_o \approx 0.35$  for G5 dwarfs (Cox 2000), then the  $E(R - I)$  toward NGC 6822 would be  $\approx 0.20$ , a value identical to the one proposed by Gallart et al. (1996)

We can see right away, without the analysis of the space distribution of the C stars, that NGC 6822 extends much further than its optical image makes us believe. Figure 2 displays the CMD of the periphery of our  $42' \times 28'$  field. Only stars farther than  $17.1'$  ( $\sim 2.5$  kpc) from the center of the field are plotted. A weak giant branch is present. The true extent of NGC 6822 is however quite difficult to assess from its CMD because of the heavy foreground contribution by Galactic stars. As we shall see, C stars are valuable in this respect because none are in the foreground!

### 3.2. The color-color diagram

The color-color diagram of the whole CFH12K field of NGC 6822 is presented in Figure 3. 904 stars satisfy our criteria and are called C stars. We define, for the purpose of comparison from galaxies to galaxies, C stars as stars with  $(R - I)_o > 0.90$  and, in the case of narrow CN and TiO filters, stars with  $(CN - TiO) > 0.30$ . This  $(R - I)_o$  limit corresponds to spectral type M0, according to Bessel (1991). Battinelli & Demers (2000) and Aaronson et al. (1985) showed that  $(CN - TiO)$  is very little affected by reddening. This definition is obviously restrictive, one can easily see that on, Fig. 3, there are bluer C stars extending to the lower left of the C star. We discuss those bluer stars in section 4.2. The C stars identified, along with their J2000.0 equatorial coordinates, magnitudes and colors, are listed in Table 2, (only the first few stars are given in the paper version). Star c236 is the one spectroscopically confirmed by Aaronson et al. (1984).

### 3.3. Comparison of the Las Campanas and CFHT results

The Las Campanas photometry (LC) yielded 688 C star candidates. A coordinate match with the CFHT candidates shows that only 542 are common to both sets. A comparison of the apparent magnitude of stars common to both sets, displayed in Figure 4, shows that a substantial number of faint C stars are missing from the LC data set. The number of C star candidates, in the LC list, could have been increased by lowering the acceptance criteria based on the photometric errors. We believe, however, that the use of the combined CN and TiO magnitudes to produce a pseudo I magnitude has lowered the photometric quality of I magnitudes compared to R magnitudes of similar brightness. This approach has obviously raised the acceptable magnitude of the LC data set but it has allowed us to identify the C star population of NGC 6822, for follow-up spectroscopy, more than one year before we obtain the CFHT observations confirming the existence of a huge C star population. About 100 stars were identified as C stars in the LC data set but were not retained in the CFHT list. A search and match in the whole CFH12K database revealed that nearly all them can be matched to stars. Some of them are just a little bit too blue to be called C stars or have a  $(CN - TiO)$  index a little too small. The majority, however, can match in position, fainter stars of various colors. This suggests that the LC stars are actually blends. The pixel scale of the Swope telescope CCD is not as good as the one of the CFHT. The LC fields extend further west than the CFH12K mosaic. Three possible C stars outside of the CFH12K field are listed in Table 3. These candidates need to be confirmed by more accurate photometry. They are located on the edge of the Swope Telescope field and their photometric errors are, in some cases, near the limit of rejection.

#### 4. DISCUSSION

The mean properties of the carbon star population of NGC 6822 are nearly identical to the one of IC 1613, a dwarf irregular galaxy of lower mass but with a substantial C star population. The mean magnitude and color of the 904 C stars are:  $\langle I \rangle = 19.257$  and  $\langle (R - I) \rangle = 1.368$ , corresponding to  $\langle M_I \rangle = -4.70$  and  $\langle (R - I)_o \rangle = 1.17$ . Albert et al. (2000) quote  $\langle M_I \rangle = -4.69$  and  $\langle (R - I)_o \rangle = 1.18$  for the 195 C stars in IC 1613. The abundance of IC 1613 was estimated, from the color of the tip of the giant branch, by Freedman (1988) to be  $[\text{Fe}/\text{H}] = -1.3$ , a value lower than the adopted metallicity for NGC 6822. This comparison suggests that the metallicity may have little effect on the mean  $M_I$  of a C star population.

##### 4.1. The Bolometric magnitude distribution of C stars

Costa & Frogel (1996) were able to determine the bolometric magnitude of C stars in the Large Magellanic Cloud (LMC) from their R, I photometry. Since the newly established metallicity of NGC 6822 (Venn et al. 2001) is quite close to the metallicity of the LMC, we may assume that their equation also applies to the NGC 6822 C stars. Figure 5 displays the bolometric magnitudes of C stars, listed in Table 2, as a function of their  $(R - I)_o$ . Our distribution, when compared to the one of Costa & Frogel (1996) for the LMC, is truncated on the blue side due to our adoption criterion. Figure 5 does show, however, that NGC 6822 does contain one C star brighter than  $M_{bol} = -6.4$ , the limit according to models of Boothroyd, Sackmann & Ahern (1993). That star is c043, a bright (in I) star located near the center of NGC 6822.

##### 4.2. Bluer “C stars”

Demers & Battinelli (2002) have recently shown that several spectroscopically identified C stars in the Leo I dwarf spheroidal galaxy are bluer than our adopted  $(R - I)_o$  limit. There could then certainly be a number of bluer C stars in NGC 6822. Indeed, one can easily see on the color-color diagram (Fig. 3) that there is a natural blue extension of the “C star branch”. In order to compare the photometric properties of these stars, with the previously defined C stars, we select, on the color-color diagram, stars in the following box:  $0.8 < (R - I) < 1.1$  and  $(\text{CN-TiO}) > 0.25$ . 341 stars are in this region of the color-color diagram. As expected, these bluer stars are located on the nearly vertical part of the red giant branch. Figure 6 presents a close-up of the CMD and histograms comparing the magnitude distributions of the two groups of stars. Contrary to redder C stars, which have a narrow range of magnitude, the bluer stars show a large magnitude spread.

### 4.3. The known S star

Aaronson et al. (1985) spectroscopically confirmed the presence of at least one S star in NGC 6822. This star is in our database but its color indices are such that our color-color diagram cannot really distinguish it from M stars. Its magnitude and colors are:  $I = 18.346$ ;  $(R-I) = 1.340$ ;  $(CN-TiO) = 0.056$ . The bolometric magnitude of this S star, using the same relation than for C stars, is  $M_{bol} = -5.90$ . Brewer et al. (1996) found a single S star among their AGB stars with a surprisingly high bolometric magnitude,  $-6.2$ .

In our coordinate system, the J2000.0 coordinates this S star are some 10 arcsec from the ones quoted by Aaronson et al. (1985). They are:  $\alpha = 19^h 45^m 01.3^s$ ,  $\delta = -14^\circ 49' 32.1''$ . There could be other S stars in NGC 6822, spectroscopy would be needed to confirm the nature of the stars lying in between the C and M regions on the color-color diagram.

### 4.4. The spatial distribution of C stars and red giant stars

We display, in Figure 7, the 904 C stars of NGC 6822 over a  $42' \times 28'$  ESO Digital Sky Survey (DSS) Image centered on NGC 6822. C stars reveal that the stellar population of NGC 6822 extends over a much larger volume than its optical image would make us believe. Furthermore, C stars are not restricted to the HI disk, nicely mapped by de Blok & Walter (2000), but are found in a spheroidal halo. Radial velocities will help establishing if C stars follow or not the HI rotation. The surface density profile of the C stars, shown in Figure 8, is well fitted by a power law with a scale length of  $3.0 \pm 0.1$  arcmin, corresponding to 436 pc at the distance of NGC 6822. We assume circular symmetry. The exponential profile can be followed to five scale lengths. This scale length is to be compared with  $112'' \pm 50''$  given by Hodge et al. (1991).

The fact that we find intermediate age stars in the outer halo of a dwarf galaxy is surprising since the halos so far known around dwarf galaxies (Lee 1993, Minniti & Zijlstra 1997, Minniti, Zijlstra, & Alonso 1999, Aparicio & Tikhonov 2000, Aparicio, Tikhonov & Karachentsev 2000) consist of  $\sim 10$  Gyr stars. We must stress, however, that a weak intermediate age population will be missed by a CMD approach since there is no way to distinguish intermediate and old age red giants.

Photometric properties of C stars, close to the center and in the periphery of NGC 6822, appear to be essentially the same. We divide the data into four radial bins to calculate mean magnitudes and mean colors. We find dispersions of  $\pm 0.01$  for  $\langle I \rangle$  and  $\pm 0.02$  for  $\langle (R-I) \rangle$ .

Since Fig. 1 shows a well defined upper giant branch, one can select a representative sample of NGC 6822 giant stars from their position on this CMD. This would represent a mixture of old and intermediate age stars. We select, from the CMD of the whole field, giant stars in a narrow parallelogram in the magnitude range  $19.5 < I < 21.3$  and with the appropriate R-I intervals, slightly variable with magnitude to take into account the sloping giant branch. More than 18000

stars are in this box, including a number of foreground stars. The smoothed surface density map of the giants is presented in Figure 9. No correction for the foreground contribution has been done here. An obvious asymmetry is seen, along the E-W axis, in the inner isodensity contours. The outermost contour, corresponding to a surface density of 13.5 stars per arcmin<sup>2</sup>, is roughly elliptical with an ellipticity of  $e \approx 0.1$  and a position angle of  $PA \approx 60^\circ$ . This is quite different from the orientation of the HI disc ( $PA \approx 125^\circ$ ) and not aligned with the optical bar which is, according to Hodge (1977), at  $PA = 10^\circ \pm 3^\circ$ . The outermost contour has a major axis of  $\sim 23'$  or 3.3 kpc at the distance of NGC 6822. The estimated foreground contribution to giant counts, detailed below, amount to less than 25% of the counts in the outermost contour.

Since it appears that the ellipticity of the halo of NGC 6822 is small in the outer parts and not evident for the inner contours, we decided to neglect it and compute radial counts in circular annuli, like we did for the C stars. However, for red giants, the foreground pollution is not negligible and must be taken into account in the outer parts. We estimate it from star counts in two strips on the eastern and western sides of the CFH12K field. We obtain:  $3.5 \pm 0.2$  stars per arcmin<sup>2</sup>. The scale length, obtained by least-square fit to the middle points of Figure 8, is  $3.3' \pm 0.2$  a value similar to the one obtain from C stars. We can thus conclude that the old and the intermediate age halos have the same size and show no pronounced asymmetry like the hydrogen cloud surrounding NGC 6822.

#### 4.5. The C/M ratio

The size of NGC 6822, relative to our mosaic, is such that it is quite difficult to evaluate the foreground contribution to the M stars seen in the color-color diagram. Furthermore, the fact that NGC 6822 is at a relatively low Galactic latitude makes the problem even worst. We evaluated the foreground by counting M stars (with  $I < 21.0$ ) in two 1000 pixel wide strips on the eastern and western extremities of the field. Their numbers were 746 and 717 respectively. We have of course to assume that the NGC 6822 contribution is negligible in these areas. This is not strictly true since we see a few C stars up to the edge of the field. The total number of M stars ( $I < 21.0$ ) in the whole field is 9930. From the two counts above, we estimate that there are  $8989 \pm 184$  foreground M stars. The number of M stars within NGC 6822 is thus sensibly similar to the number of C stars and equal to  $941 \pm 184$ , taking into account this uncertainty, we obtain a global  $C/M = 1.0 \pm 0.2$ . The huge number of foreground M stars, compared to the NGC 6822 M stars, makes hopeless any attempt to investigate a radial dependence of C/M. One would need a more accurate evaluation of the foreground contribution from star counts in regions outside of our field. The M stars counted are those with spectral type M0 or later that have  $(R-I)_o > 0.90$ .

We are grateful to Carme Gallart to have provided her NGC 6822 photometry to enable us to calibrate the CFH12K data. This project is supported financially, in part, by the Natural Sciences and Engineering Research Council of Canada (S. D.).

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Fig. 1.— Color-magnitude diagram of the whole CFH12K field, centered on NGC 6822.

Fig. 2.— Color-magnitude diagram of the periphery of the field, farther than  $17.1'$  from the center of NGC 6822. We can still see a weak giant branch.

Fig. 3.— Color-color diagram of the  $42' \times 28'$  field, hundreds of C stars are present. Nearly 65000 stars are plotted.

Fig. 4.— I magnitude distribution of the C stars listed in Table 2. The shaded histogram corresponds to the 542 C stars common to both Las Campanas and CFHT data. It reveals the incompleteness of the LC data at faint magnitudes.

Fig. 5.— The bolometric magnitude of C stars as a function of their intrinsic colors.

Fig. 6.— A close-up of the CMD is shown in the upper panel. Dots are the 904 C stars while crosses are the bluer stars on the C stars “branch”. The magnitude distributions of the two groups of stars are compared in the lower panel.

Fig. 7.— C stars are plotted over the image of NGC 6822 from the DSS. The size of the field corresponds to the CFH12K. North is on top and East is on the left. Three C stars, listed in Table 3, are just outside the western limit.

Fig. 8.— Surface density of profiles: the 904 C stars are represented by open circles while the red giants are shown as solid dots. Scale lengths are essentially the same.

Fig. 9.— Smoothed isodensity contours of the red giants brighter than  $I = 21.3$ . No correction has been done for the foreground stars. The orientation and size of the field are like the ones of Figure 7.